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ABSTRACT

Just over seven percent of first-time, full-time freshmen in 1966, 1972, and 1974 named a health profession as their long-term career choice. Though the proportion remained fairly stable, the absolute number of aspiring health professionals increased by 37.4 percent over the eight-year period, reflecting the increase in freshmen enrollments. The career choice of physician was consistently the most popular, claiming nearly half of the aspiring health professionals, followed by veterinarian, dentist, pharmacist, and optometrist, the last appealing to only 3.2 percent of this population in 1974. In 1974, over one in three aspiring health professionals was a woman; just over one in twenty was black; and another one in twenty belonged to a nonblack racial/ethnic minority group. These figures represent dramatic increases over 1966 in the numbers of women and minority group members. Aspiring health professionals generally come from more affluent and better-educated backgrounds than do the average freshman. There were some differences among the five career groups, however, as well as between the sexes and racial/ethnic categories. (Author/MSE)

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WOMEN AND MINORITIES IN HEALTH FIELDS: A TREND ANALYSIS OF COLLEGE FRESHMEN

VOLUME I

FRESHMEN INTERESTED IN THE HEALTH PROFESSIONS

ENGIN INEL HOLMSTROM
PAULA R. KNEPPER
LAURA KENT

Policy Analysis Service
American Council on Education

1976

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U.S. DEPARTMENT OF HEALTH,
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Engin Inel Holmstrom, Project Director
Paula R. Knepper

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ABSTRACT

- Just over 7 percent of first-time, full-time freshmen in 1966, 1972, and 1974 named a health profession as their long-term career choice. Though the proportion remained fairly stable, the absolute number of aspiring health professionals increased by 37.4 percent over the eight-year period, reflecting the increase in freshman enrollments.

- The career choice of physician was consistently the most popular, claiming nearly half the aspiring health professionals; it was followed by veterinarian, dentist, pharmacist, and optometrist, the last appealing to only 3.2 percent of all aspiring health professionals in 1974.

- In 1974, over one in three aspiring health professionals was a woman (one out of two in veterinary medicine); just over one in twenty was black; and another one in twenty belonged to a nonblack racial/ethnic minority group. These figures represent dramatic improvements over 1966 in the numbers of women and minority-group members: In short, the health professions are becoming less dominantly "male" and "white" career choices.

- Aspiring health professionals generally came from more affluent and better-educated backgrounds than did the average freshman. There were some differences among the five career groups, however, as well as between the sexes and racial/ethnic categories; these differences are summarized in the Highlights preceding each chapter.

CHAPTER I

INTRODUCTION AND OVERVIEW

Over the years, the Bureau of Health Manpower (BHM) of the Health Resources Administration (Department of Health, Education and Welfare) has supported research into a variety of questions relating to health education and potential manpower resources, questions vital to the national interest and the public well-being. One aspect of such research involves collecting information on students planning to major in health fields and to enter health careers: Who are they? How have they changed over the years? What institutions do they attend? What determines the stability of their choices of undergraduate major and of their career plans? How well do they do? The answers to such questions provide manpower-planners and policy-makers with essential data not only about the probable size of the future pool of health practitioners but also about its nature and quality.

In 1973-74 a three-phase study was carried out by the American Council on Education (ACE) under contract with BHM.[1] The first phase dealt with full-time freshmen who first entered college in 1967 and were followed up four years later, in 1971; its purposes were to determine the relative attractiveness of the health fields to entering freshmen, to compare students planning to major in health fields with students planning to major in other fields, and to identify factors relating to changes in the study field choices of undergraduates during the college years. The second phase compared four entering freshman classes--1966, 1968, 1970, and 1972--in order to examine trends in the characteristics of freshman aspirants to health fields. The third phase involved 1966 freshmen followed up first in 1970 and then in 1971; it differed from the first two phases in that it focused on senior-year career choice rather than on choice of a major field, examining the characteristics of those planning to enter a health career, with particular attention to prospective physicians.[2]

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[1] See Holmstrom, 1974a.

One of the major findings to emerge from the study was that the health fields became suddenly more popular in 1972. In 1966, 1968, and 1970, they attracted a steady 12 to 13 percent of entering freshmen; then, in 1972 the figure jumped to 18.3 percent--an increase of 58 percent in the absolute numbers of entering freshmen naming a health field as their probable major. This growth in popularity occurred in the health professions (except predentistry) and in nursing and allied health professions. Except for botany and "other biological sciences," the purely academic majors (biology, biochemistry, biophysics, and zoology) registered decreases. One factor that may help to explain these trends is that in the early 1970s college students were generally more career-oriented than they had been in the 1960s: They tended to choose "practical" undergraduate majors leading directly to a career rather than majors that were not job-related. It should be pointed out in this connection that other preprofessional and paraprofessional college majors also gained in popularity during this period. Another explanatory factor is the growing proportion of women and of minority-group members entering the nation's colleges and universities (an increase resulting from the burgeoning two-year college movement); as will be noted later in this chapter, much of the increase in the popularity of health careers is attributable to these groups.

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[2] The interested reader is referred to the technical reports: Holmstrom, 1973; Holmstrom & Cohen, 1974; and Holmstrom, 1974b. For summary articles on the findings, see Holmstrom, 1975a, 1975b.

Scope and Purpose of the Study

The present study grew out of the earlier one: In 1975, BHM contracted with ACE to carry out further investigations of students in health fields, particularly minorities and women. More specifically, the study focuses on freshmen who, when they entered college, declared their intention of going into a career in a health field. This report, the first volume of three presenting the results of the study, deals with freshmen planning a career in one of the health professions: medicine, dentistry, pharmacy, optometry, and veterinary medicine. The second deals with nursing and allied health professions (therapy, medical technology, and dietetics/home economics). In both these volumes, special attention is given to blacks as a minority group. The third volume concentrates on other minorities, comparing the characteristics of members of different racial/ethnic categories who plan careers in a health field.

In this report, those freshmen who named one of the health professions as their planned career are termed _aspiring health professionals_. Thus, the students who said, at the time they entered college, that they planned to become physicians will be referred to as _aspiring physicians_. The reader should bear in mind that many of these students may change their career plans while in college, drop out entirely, or fail in other ways to fulfill their freshman intentions.

The objectives of this report are, first, to describe the most recent group of aspiring health professionals on whom data are available, those who entered college as full-time freshmen in 1974; second, to describe the characteristics of women and minority-group members among aspiring health professionals; and third, to analyze trends in the characteristics of aspiring health professionals by comparing the latest group with earlier cohorts in 1966 and 1972.

Methodology

The data for this study came from the student files of ACE's Cooperative Institutional Research Program (CIRP), an ongoing longitudinal project aimed at gathering normative information on college students and at determining the impact of colleges on their students. Each fall since 1966, the CIRP has surveyed first-time, full-time freshmen at a large national sample of colleges and universities, stratified according to type (two-year college, four-year college, university), control (public, private-nonsectarian, Roman Catholic, Protestant), race (predominantly black, predominantly white), and selectivity (an estimate of the average academic ability of the entering freshman class). This stratification design usually results in 37-38 cells which are differentially sampled. In addition, student responses to the freshman questionnaire are differentially weighted so as to be representative of all entering freshmen in the United States. Thus, for instance, in 1974, the responses of 189,724 survey participants from 364 institutions were weighted to represent the total population of 1,673,134 first-time, full-time freshmen entering the nation's 2,629 postsecondary institutions.[3]

The instrument used for surveying freshmen is the Student Information Form (SIF), a four-page questionnaire which is administered to the entire class of first-time, full-time freshmen during the institution's orientation or registration period. The SIF asks for standard demographic and biographical information and, in addition, contains items on college finances, life goals, college expectations, self-ratings, and similar personal material. Each year, the SIF is revised to reflect the changing concerns of the academic and research community; thus, some items are not always strictly comparable from year to year. In most cases, however, items are repeated so as to permit the monitoring of trends.[4] The data resulting from the survey are published each year in a national norms report, which presents questionnaire responses separately by sex, as well as for all students; by type of institution; and by geographical region (East, Midwest, South, West). The 1974 SIF is contained in the Appendix.

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[3] For further information on the stratification design, sampling and weighting, see Astin et al., 1974.

This report is based on those 1966, 1972, and 1974 freshman survey participants who named one of the following as their "probable future occupation": dentist (including orthodontist), pharmacist or pharmacologist, optometrist, physician or surgeon, and veterinarian (see question 27 of the 1974 SIF). The number of cases thus identified were then weighted to represent the total group of aspiring health professionals within each freshman class as follows:

- In 1966, 15,500 unweighted cases yielded 90,760 aspiring health professionals;
- In 1972, 17,580 unweighted cases yielded 118,148 aspiring health professionals;
- In 1974, 19,317 unweighted cases yielded 124,698 aspiring health professionals.

In interpreting the findings presented here, the reader should bear in mind certain caveats. The first are methodological: Because all the figures represent weighted estimates, they are subject to error, particularly when absolute numbers rather than proportions are being discussed. Further, since the standard error of a categorical percentage is a function of that percentage and of the number of (unweighted) cases in that group, any analytic group with fewer than 50 unweighted cases is not discussed. Moreover, readers should be cautious about generalizing from small percentage differences in view of the fact that the information is derived from a weighted sample. Finally, weighting and rounding affect totals; thus, the totals may vary somewhat from one table to another.

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[4] The CIRP also follows up subgroups of these same students periodically (e.g., one year after college entry, four years after), thus enabling it to carry out its purpose of determining how colleges affect their students. No such longitudinal information is reported in this study, however, except incidentally in this opening chapter.

The second set of caveats relate to interpretation: These data refer to full-time freshmen only; the CIRP makes no attempt to survey part-time students. Many freshmen interested in health careers (especially those entering two-year colleges) may be enrolled only part time; such students are excluded from consideration here. Finally, to repeat, these are freshman career plans; they are heavily subject to change and modification.[5]

The focus of this report is 1974 aspiring health professionals. Comparisons with 1972 and 1966 aspiring health professionals are made only in those instances where significant changes have occurred. Comparisons are also made between aspiring health professionals and all 1974 entering freshmen (as reported in the national norms) whenever relevant.

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[5] When making comparisons with the earlier study, readers should bear in mind that different indicators of student interest in health fields were used in sample selection. This study was based on career choice as was Phase III of the earlier study, while Phase I and II used study field major. Although there is a great deal of overlap in the samples selected by these two measures, the populations do differ somewhat, and, therefore, should be compared with caution.

An Overview of Aspiring Health Professionals

Table I-1 shows the number of entering freshmen in 1974, 1972, and 1966 who reported that they planned a career in one of the health professions. Although the number of aspiring health professionals increased each year, parallel to increases in freshman enrollment, their proportion within all three freshman classes remained just over 7 percent.

- Between 1966 and 1972, the number of freshmen increased by 33.9 percent and the number of aspiring health professionals by 30.2 percent

Table I-1

Number and Percent of 1974, 1972, and 1966 Freshmen Aspiring to Become Health Professionals, by Sex and by Race

	Physicians		Dentists		Pharmacists		Optometrists		Veterinarians		Total Health Profn.		Total Freshman Class
	N	%	N	%	N	%	N	%	N	%	N	%	
Men:													
1974	40,142	4.6[a]	15,005	1.7	9,843	1.1	2,773	.3	11,826	1.4	79,589	9.1	873,376
1972	46,308	5.6	15,338	1.8	9,366	1.1	2,856	.3	13,363	1.6	87,731	10.4	839,499
1966	40,496	6.4	16,764	2.7	7,600	1.2	1,126	.2	9,254	1.5	75,240	11.9	631,576
Women:													
1974	19,566	2.4	6,070	.8	6,002	.8	1,268	.2	12,203	1.5	45,109	5.6	799,758
1972	15,284	2.1	2,747	.4	3,802	.5	437	.1	8,147	1.1	30,417	4.2	718,313
1966	8,437	1.6	1,769	.3	1,348	.4	218	.0+	3,148	.6	15,520	2.0	531,547
Blacks:													
1974	5,101	4.1	955	.8	988	.8	153	.1	537	.4	7,734	6.2	123,812
1972	4,224	3.1	1,011	.7	793	.6	83	.1	338	.2	6,449	4.8	135,504
1966	2,521	4.3	547	.9	453	.8	73	.1	241	.4	3,835	6.6	58,156
Nonblacks:													
1974	54,603	3.5	20,118	1.3	14,855	1.0	3,888	.3	23,491	1.5	116,955	7.5	1,549,322
1972	57,865	4.1	17.073	1.2	12,375	.9	3,211	.2	21,170	1.5	111,694	7.8	1,422,008
1966	46,410	4.2	17,986	1.6	9,094	.8	1,272	.1	12,159	1.1	86,921	7.9	1,104,967
Total:													
1974	59,708	3.6	21,075	1.3	15,845	.9	4,041	.2	24,029	1.4	124,698	7.4	1,673,134
1972	62,092	4.0	18,085	1.2	13,168	.8	3,293	.2	21,510	1.4	118,148	7.6	1,557,512
1966	48,933	4.2	18,533	1.6	9,548	.8	1,344	.1	12,402	1.1	90,760	7.8	1,163,123

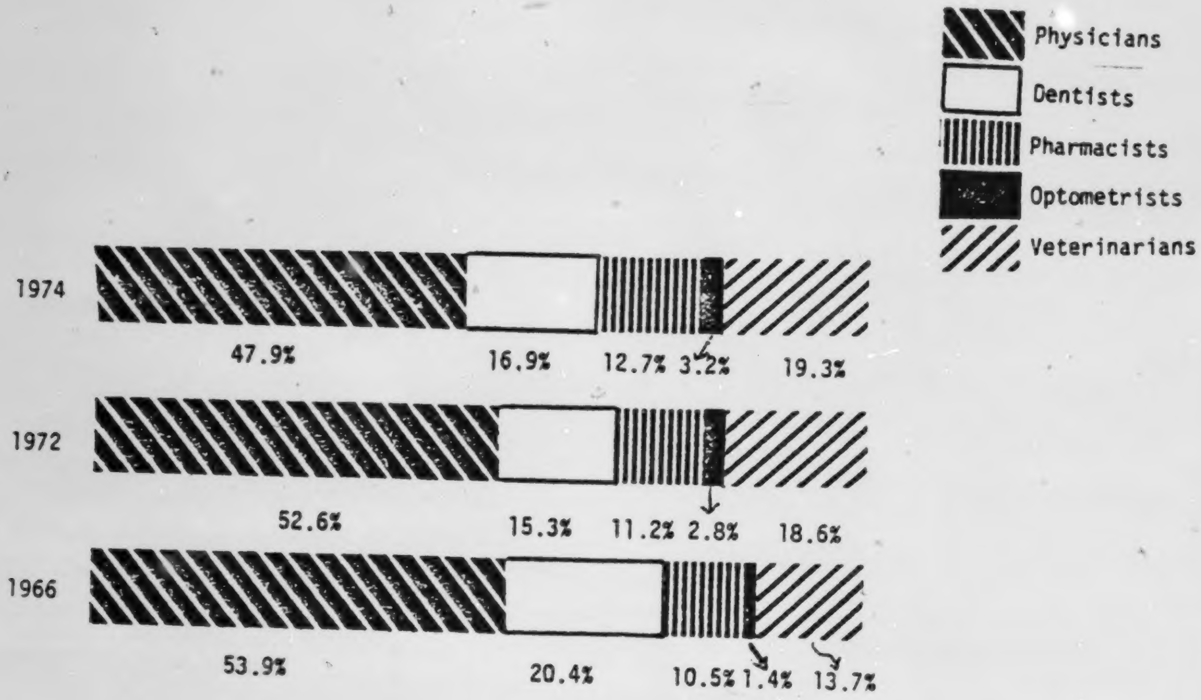
[a] 40,142 ÷ 873.376

- Between 1972 and 1966, the number of freshmen increased by 7.4 percent and the number of aspiring health professionals by 5.5 percent.
- Between 1966 and 1974, the number of freshmen increased by 43.8 percent and the number of aspiring health professionals by 37.4 percent.

The choice of physician was consistently the most popular, claiming nearly half the aspiring health professionals. Veterinarian and dentist ranked next, followed by pharmacist. Relatively few named optometrist as their freshman career choice (Figure I-1).

FIGURE I-1

Distribution of 1974, 1972, and 1966 Freshmen Aspiring to Health Profession Careers



Sex and Race/Ethnicity

Table I-2 shows the number of aspiring health professionals in three freshman classes by sex and race.[6]

Table I-2

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Health Professionals, by Sex and Race

	Physicians	Dentist	Pharmacists	Optometrists	Veterinarians	Total[a]
Nonblack Men:						
1974	37,897	14,510	9,415	2,683	11,573	76,079
1972	44,507	14,546	8,919	2,817	13,179	83,968
1966	38,819	16,262	7,322	1,101	9,078	72,582
Nonblack Women:						
1974	16,708	5,608	5,441	1,205	11,918	40,880
1972	13,360	2,528	3,457	393	7,992	27,730
1966	7,593	1,724	1,773	171	3,082	14,343
Black Men:						
1974	2,244	494	428	90	252	3,508
1972	2,301	791	447	39	184	3,762
1966	1,677	502	278	25	176	2,658
Black Women:						
1974	2,857	461	561	63	285	4,226
1972	1,924	220	345	44	155	2,688
1966	844	45	175	47	66	1,177

Among students who, at college entry, expressed an interest in a health profession, men greatly outnumbered women. In 1966, 82.9 percent of the aspiring health professionals, but only 54.3 percent of the total freshman class, were men. By 1974, the proportion of male aspirants had declined to 63.8 percent, but this figure was still considerably larger than the proportion of men in the total freshman class (52.2 percent). Nonetheless, by 1974, one out of three aspiring health professionals was a woman; since 1966, the number of women interested in health professions has registered a dramatic increase of 190.7 percent while the number of men had increased by only 5.8 percent.

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[6] In the column heads of this table and all others throughout the report, the term nonblacks includes respondents to the following categories: White/Caucasian; American Indian; Oriental; Mexican-American/Chicano; Puerto Rican-American; and Other. The term blacks includes respondents to the following category: Black/Negro/Afro-American.

The proportion of blacks in the total freshman class was 5 percent in 1966, had increased to 8.7 percent in 1972, then declined to 7.4 percent in 1974. The proportion of blacks among aspiring health professionals, on the other hand, climbed steadily: from 4.2 percent in 1966, to 5.4 percent in 1972, and finally to 6.2 percent in 1974. Nevertheless, blacks remained underrepresented, relative to their proportions in the total freshman class. Between 1966 and 1974, the increase in the absolute numbers of blacks among aspiring health professionals was 101.7 percent, whereas the increase in the absolute number of nonblacks was only 34.6 percent.

Interestingly, the increase in the number of black women was much larger than the increase in the number of nonblack women. In 1974, 54.6 percent of the blacks planning to become health professionals were women, compared with 35 percent of the nonblacks. In 1966, only 30.7 percent of the blacks aspiring to the health professions were women, compared with 16.5 percent of the nonblacks. In summary, during the eight-year period covered here:

- the number of black women increased by 259 percent,
- the number of nonblack women increased by 185 percent,
- the number of black men increased by 32 percent, and
- the number of nonblack men increased by 4.8 percent.

Thus, by 1974, careers in the health professions had become increasingly popular among all freshmen, though more so among women, particularly black women, than among men.

Table I-3 presents a more detailed breakdown of students by racial/ethnic category.[7] The great majority of freshmen inter-

Table I-3

Numbers of 1974, 1972, and 1966 Aspiring Health Professionals Belonging to Specific Racial/Ethnic Groups

Racial/Ethnic Category	Physicians	Dentists	Pharmacists	Optometrists	Veterinarians	Total[a]	%
Whites:							
1974	50,648	18,743	14,069	3,668	22,937	110,065	87.3
1972	54,469	15,708	11,653	3,047	20,729	105,606	87.9
1966	44,367	17,128	8,559	1,155	11,559	82,768	82.0
Blacks:							
1974	5,101	955	988	153	537	7,734	6.1
1972	4,224	1,011	793	83	338	6,449	5.4
1966	2,521	547	453	73	241	3,835	4.3
American Indians:							
1974	542	89	61	47	237	976	0.8
1972	969	186	105	9	228	1,497	1.2
1966	99	72	19	0	91	281	0.3
Orientals:							
1974	1,409	417	263	71	94	2,254	1.8
1972	1,123	468	370	70	106	2,137	1.8
1966	507	180	174	52	35	948	1.1
Mexican-Americans:[b]							
1974	675	485	221	25	211	1,617	1.3
1972	933	602	137	84	42	1,798	1.5
1966	---	---	---	---	---	---	---
Puerto Ricans:[b]							
1974	723	30	64	56	114	987	0.8
1972	320	35	34	10	29	428	0.4
1966	---	---	---	---	---	---	---
Other:							
1974	1,367	567	212	54	290	2,490	2.0
1972	1,274	382	264	5	332	2,257	1.9
1966	1,019	520	263	11	332	2,145	2.4

[a] These totals are larger than those reported elsewhere because some students indicated membership in more than one racial/ethnic category and thus were double counted.

[b] In 1966, these two groups were not specified but were included in the "other" category.

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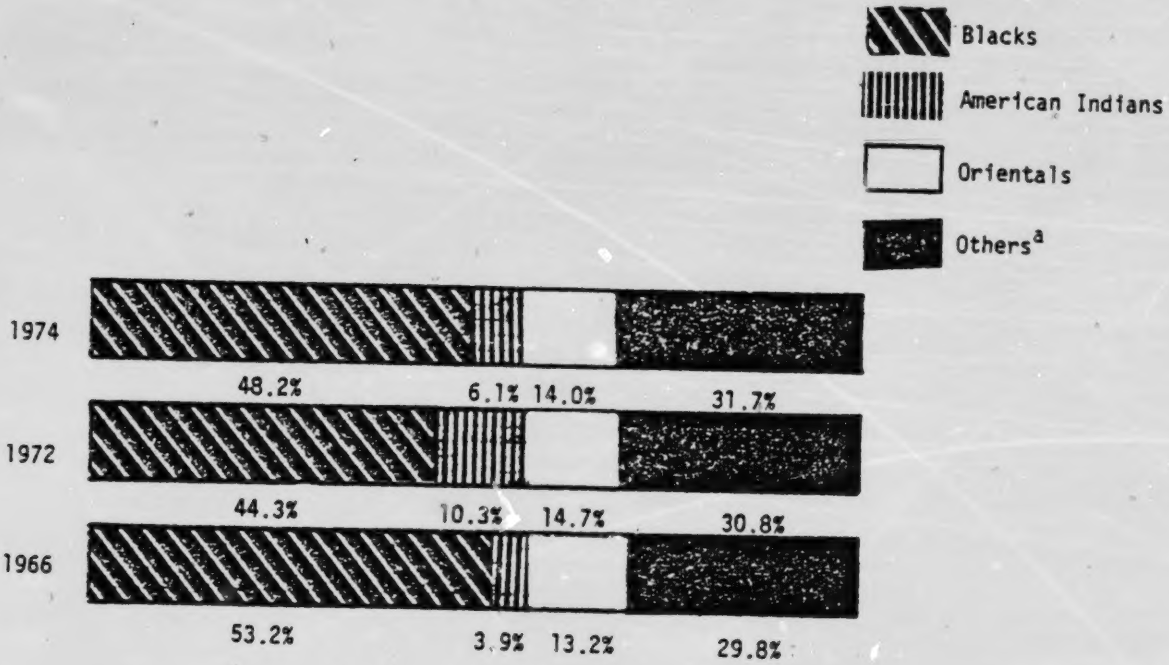
[7] The total number of students presented in this table differs from the total number presented in Table I-1 because the racial/ethnic item on the SIF asked the respondent to check all categories that applied, and a few students indicated membership in more than one category. Thus, there was some double counting of these students.

ested in the health professions were white: 92 percent in 1966, 87.9 percent in 1972, and 87.3 percent in 1974. Of the remainder, blacks constituted the largest category, although their proportion declined from 53.2 percent of all minority-group members in 1966 to 48.2 percent in 1974 (Figure I-2). The second largest group was the "other" category, which included Mexican-Americans and Puerto Ricans,[8] followed by Orientals and American Indians.

FIGURE I-2

Racial/Ethnic Membership of Nonwhite Students Aspiring to Health Profession Careers--1974, 1972, 1966 Freshman Classes



[a] Includes Chicanos and Puerto Ricans.

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[8] In 1966, the race/ethnicity item did not specify the categories Mexican-American and Puerto Rican. Thus, for comparative purposes, these groups are included in the "other" category for all three years.

American Indians were the minority group that experienced the greatest increase (247.3 percent) between 1966 and 1974 with respect to absolute numbers of aspiring health professionals, although in 1974 they still constituted fewer than 1 percent of the freshmen interested in a career in the health professions. The number of Orientals registered an increase of 137.8 percent, and the number of blacks just about doubled (a 101.7 percent increase). The smallest growth (16.1 percent) was registered in the "other" category. No information is available on Chicanos and Puerto Ricans for 1966, but between 1972 and 1974, their numbers increased by 17 percent.

Table I-4 shows these increases in the number of students by race/ethnicity and by sex. It is clear, again, that the increased popularity of the health professions among entering freshmen is attributable chiefly to a growing interest on the part of women and of minority-group members; since these students still constituted only a small proportion of aspiring health professionals, however, the total number of aspiring health professionals increased by just 37.4 percent.

In addition, although the number of minority-group students interested in health professions has increased since 1966, that growth seems to have peaked in 1972. The same phenomenon occurred with respect to minority-group representation in the total freshman class, which declined slightly between 1972 and 1974.[9] A more complete

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[9] That this decline does not necessarily represent a trend is indicated by the most recent national norms (see Astin et al.,1975), which shows that minority enrollments were up in fall 1975, particularly among blacks (who constituted 9 percent of all entering freshmen, compared with 7.4 percent in 1974) and Orientals (1.5 percent, compared with .9 percent in 1974). Proportions of Mexican-Americans, Puerto Ricans, and "others" rose slightly; the figure for American Indians was the same in both years (.9 percent).

Table I-4

Percentage Increase Between 1966 and 1974 in the Absolute Number of Aspiring Health Professionals, by Sex and Race

	Physician	Dentist	Pharmacist	Optometrist	Veterinarian	Total
Total	22.0	13.7	66.0	200.7	93.8	37.4
Men	-0.9	-10.5	29.5	146.3	27.8	5.8
Women	131.9	243.1	208.1	481.7	287.6	190.7
Whites	14.2	9.4	64.4	217.6	98.4	33.0
Blacks	102.3	74.6	118.1	109.6	122.8	101.7
American Indians	447.5	23.6	221.1	[a]	160.4	247.3
Orientals	177.9	131.7	51.1	36.5	168.6	137.8
Others	34.2	9.0	-19.4	390.9	-12.6	16.1

[a] None in 1966 sample; also no data on Mexican-Americans and Puerto Ricans.

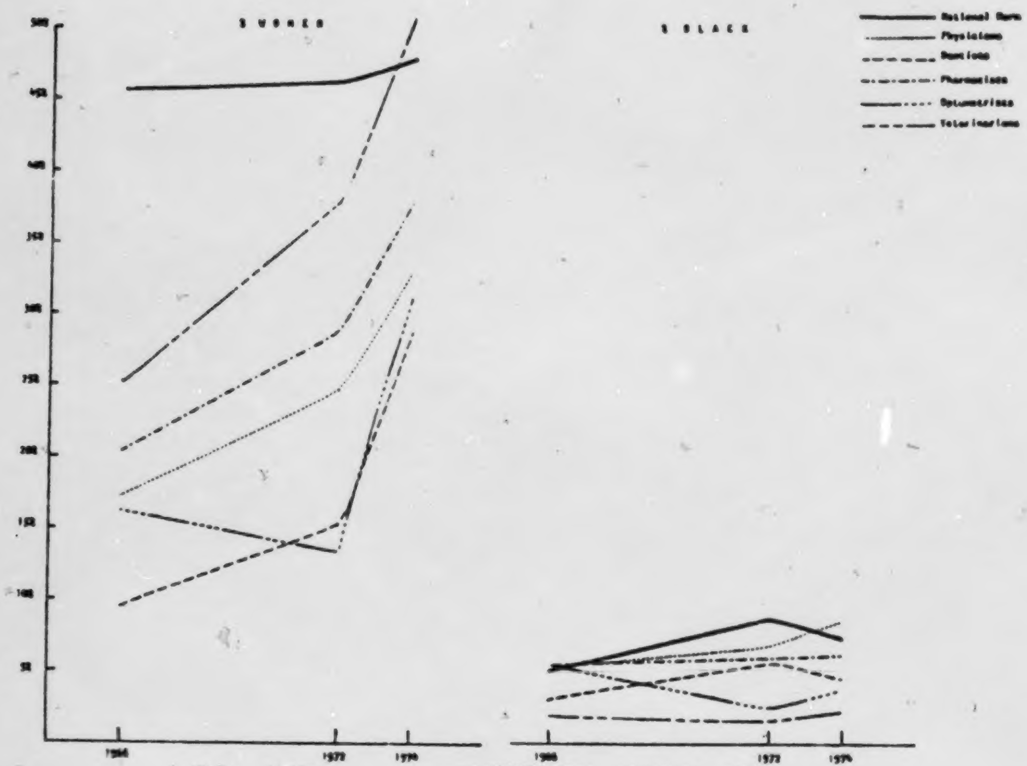
description of aspiring health professionals by detailed racial/ethnic categories will be presented in the third report of this series.

Finally, the five separate health professions (i.e., medicine, dentistry, pharmacy, optometry, and veterinary medicine) differed somewhat in their sex and racial/ethnic composition and in their rates of increase. Women were best represented among aspiring veterinarians (50.8 percent in 1974), their number having increased by 287.6 percent between 1966 and 1974 (Table I-4). In 1974, the second largest concentration of women was among aspiring pharmacists (37.9 percent), followed by aspiring physicians (32.8 percent), optometrists (31.4 percent), and dentists (28.8 percent). In each group, however, the number of women increased at a much faster rate than it did within entering freshman classes (Figure I-3).

With respect to racial/ethnic distribution within each health

FIGURE I-3

Sex and Race Distribution of Students Aspiring to Health Profession Careers in Three Freshman Classes



profession in 1974, whites were most concentrated in veterinary medicine (95.5 percent) and optometry (90.8 percent) and least so in medicine (84.8 percent); roughly 88 percent of aspiring dentists and pharmacists were white. Blacks were best represented among aspiring physicians (8.5 percent) and aspiring pharmacists (6.2 percent) and least represented among aspiring veterinarians (2.2 percent) (Figure I-3). The proportion of blacks among aspiring physicians increased since 1972 although the proportion of blacks in the total freshman class dipped. The increase in absolute numbers of blacks between 1966 and 1974 was largest for that profession (122.8 percent). American Indians, who constituted only .9 percent of all

1974 entering freshmen, were overrepresented (1.2 percent) among aspiring optometrists and underrepresented among aspiring dentists and pharmacists; in absolute numbers, however, the growth rate for American Indians was largest for the field of medicine, a 447.5 percent increase between 1966 and 1974. Orientals were well-represented, constituting 1.8 percent of the aspiring health professionals, compared with only .9 percent of all freshmen; they were particularly likely to plan careers in medicine (2.4 percent) or dentistry (2 percent), a field also favored by Mexican-Americans (2.3 percent) and "Others" (2.7 percent) in the aspiring health professional group. Puerto Ricans, on the other hand, were least likely to plan on careers as dentists and most likely to name physician as their career choice. Overall, then, minority-group members seemed to favor medicine and to avoid veterinary medicine.

The largest increase in absolute numbers of students occurred among women interested in optometry (481.7 percent), the health profession that also registered the greatest jump in popularity between 1966 and 1974 (a 200.7 percent increase). It was followed by veterinary medicine (93.8 percent), pharmacy (66 percent), medicine (22 percent), and dentistry (13.7 percent). The last two fields declined slightly in popularity among men.

Socioeconomic Background

Freshmen aspiring to the different health professions differed slightly in their socioeconomic backgrounds (Tables I-5 and I-6). Medicine attracted students from higher socioeconomic levels, with respect both to parental income and to parents' education; pharmacy attracted students from lower socioeconomic levels. The median parental income reported by aspiring pharmacists ($14,099) was $3,650 less than that reported by aspiring physicians ($17,749). Further, 29.1 percent of the aspiring pharmacists reported that their father was a college graduate, compared with 47.8 percent of the aspiring physicians; comparable figures for mother's education were 18.4 percent and 30.2 percent, respectively.

Table I-5

Median Parental Incomes, by Race and by Sex
1974 Aspiring Health Professionals

	Physician	Dentist	Pharmacist	Optometrist	Veterinarian
Nonblack men	$18,933	$18,295	$13,845	$16,285	$16,666
Black men	$ 9,681	$ 9,031	$ 9,704	$14,999	$ 9,437
Total men	$18,452	$18,075	$13,660	$16,211	$16,541
Nonblack women	$17,562	$14,944	$15,975	$13,354	$15,273
Black women	$ 9,463	$10,263	$ 7,705	$ 9,249	$11,779
Total women	$16,250	$14,624	$15,100	$13,150	$15,150
Nonblacks	$18,549	$17,599	$14,399	$15,350	$16,050
Blacks	$ 9,565	$ 9,519	$ 9,159	$13,425	$10,950
Total	$17,749	$17,300	$14,099	$15,200	$15,950

Table I-6

Proportion Reporting that Their Parents Were at Least College Graduates by Race and by Sex--1974 Aspiring Health Professionals

	Physician	Dentist	Pharmacist	Optometrist	Veterinarian
Father's Education:					
Nonblack men	49.8	42.8	26.1	41.5	34.3
Black men	26.6	16.8	17.6	2.2	14.7
Total men	48.5	42.1	25.7	40.3	33.4
Nonblack women	49.1	30.7	36.4	17.1	37.0
Black women	29.5	30.1	17.0	21.7	25.4
Total women	46.5	30.6	34.6	17.3	36.8
Nonblacks	49.6	39.6	30.8	34.0	36.4
Blacks	28.2	23.3	17.3	8.6	20.4
Total	47.8	38.9	29.1	33.2	36.2
Mother's Education:					
Nonblack men	30.2	22.6	15.9	20.6	20.2
Black men	27.8	26.7	17.1	50.7	11.3
Total men	30.2	22.7	16.1	21.6	20.1
Nonblack women	31.3	15.6	22.8	14.5	25.5
Black women	23.8	30.0	15.3	0.0	33.2
Total women	30.4	16.6	22.1	13.8	25.7
Nonblacks	30.6	20.7	18.5	18.7	23.0
Blacks	26.1	24.3	16.1	30.0	22.9
Total	30.2	21.0	18.4	19.1	23.0

Generally, men and nonblacks came from higher socioeconomic levels than did women and blacks, the exceptions to this pattern being black women interested in dentistry and nonblack women interested in pharmacy; both these groups tended to have more affluent and well-educated parents (or, at least, fathers) than did their male counterparts. The racial difference with respect to parental income and education was particularly marked among aspiring physicians.

Father's occupation was somewhat related to freshman career choice in that relatively large proportions of aspiring health professionals had fathers who were either in the same health profession named by the entering freshmen or in one of the other health professions; this relation was particularly strong among aspiring physicians and optometrists (Table I-7).

Table I-7

Father's Occupation--1974 Aspiring Health Professionals

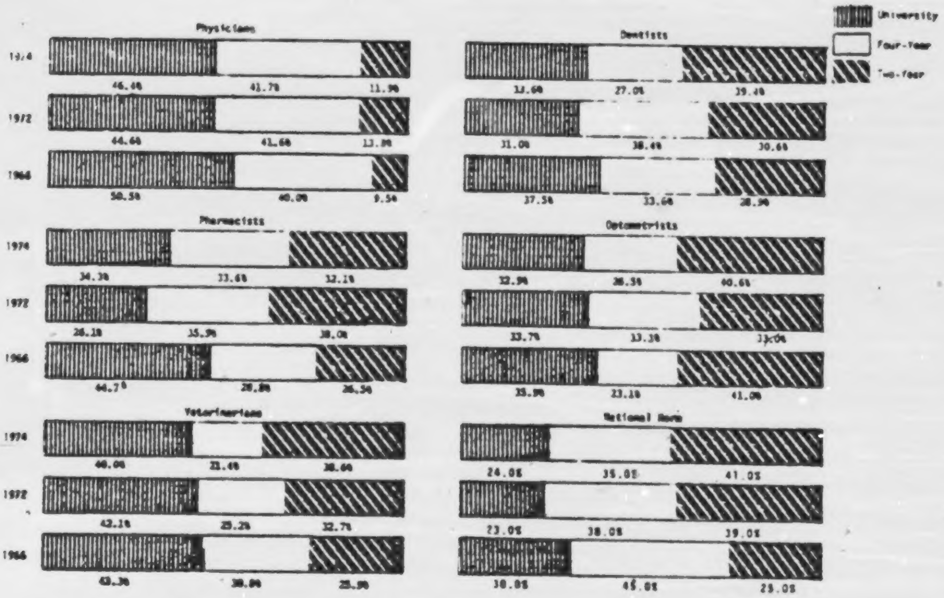
Father's Occupation	Physician	Dentist	Pharmacist	Optometrist	Veterinarian
Physician	8.5	2.0	1.3	2.2	2.3
Dentist	1.3	4.1	.5	.8	.6
Pharmacist	.7	.7	5.2	.3	.4
Optometrist	.3	.2	.1	9.2	.1
Veterinarian	.3	.3	.1	1.1	1.4
Nurse	.1	.0	.0	.0	.1
Home economist/ dietician	.0	.0	.0	.0	.0
Health technician/ technologist	.2	.5	.1	.3	.2
Therapist	.0	.0	.3	.0	.1
Total Health Profession	11.4	7.8	7.6	13.9	5.2
Other	88.6	92.2	92.4	86.1	94.8

Institutional Distribution

Figure I-4 shows the institutional distribution of all entering freshmen and of students aspiring to each of the health professions. The growth of the two-year college sector in recent years has brought about profound changes in enrollment patterns: In 1966, 30 percent of all first-time, full-time freshmen entered universities, 45 percent entered four-year colleges, and only 25 percent entered two-year colleges. In 1974, the corresponding figures were 24 percent, 35 percent, and 41 percent, respectively.

FIGURE I-4

Institutional Distribution of Students Aspiring to Health Profession Careers--1974, 1972, and 1966 Freshman Classes



The enrollment patterns of aspiring health professionals were similar, except that they were consistently overrepresented at universities. For instance, in 1966 40.7 percent of aspiring physicians, but 30 percent of all freshmen, were enrolled in universities. In

1974, the corresponding figures were 45.7 percent and 24 percent, respectively. Among aspiring health professionals, students interested in medicine as a career were more likely than were others to enroll in universities: In fact, only about one in ten aspiring physicians enrolled in two-year colleges, in contrast to two-fifths of aspiring dentists, optometrists, and veterinarians.

Race and sex to some extent determined the enrollment patterns of aspiring health professionals (Table I-8). Except among aspiring

Table I-8

Institutional Distribution, by Sex and by Race--
1974 Aspiring Health Professionals

	Physician	Dentist	Pharmacist	Optometrist	Veterinarian
Men:					
University	46.6	37.6	30.1	40.8	41.4
Four-year college	40.8	30.6	32.9	31.2	22.3
Two-year college	12.6	31.8	37.0	28.0	36.3
Women:					
University	43.7	23.5	40.5	17.3	38.2
Four-year college	44.7	19.5	36.1	16.6	21.1
Two-year college	11.5	57.0	23.4	66.1	40.7
Nonblacks:					
University	47.9	34.6	35.2	34.4	40.2
Four-year college	39.8	26.1	31.6	25.3	21.0
Two-year college	12.3	39.3	33.2	40.3	38.8
Blacks:					
University	22.5	18.3	14.4	10.2	20.8
Four-year college	65.5	58.9	72.3	63.2	54.4
Two-year college	12.0	22.8	13.4	26.6	24.8

pharmacists, women were less likely to enroll in universities and more likely to enroll in two-year institutions than were men, and the percentage differences were particularly great in the case of aspiring dentists and optometrists. Even more noteworthy are racial/ethnic differences: Nonblacks were from two to three times more likely to enroll in universities than were blacks, who tended to be concentrated in four-year colleges, the institutional type that includes most of the predominantly black institutions.

Who Will Remain True to Freshman Career Plans?

The career plans of entering freshmen are highly volatile. In a study of 1961 freshmen followed up in 1965, Astin and Panos (1969) found that fully three in four students changed their career plans after entering college, though stability rates varied considerably by field: For instance, the career choice of pharmacist had the highest stability rate of all health professions (33.2 percent) and the career choice of dentist had the lowest (21.7 percent). Data from Phase III of the earlier ACE study of students in health fields, however, suggest that more recent classes of college students are more likely to remain true to their freshman choice of a health career. The career choice of physician had the highest stability rate in that 63.1 percent of the students who named that career choice in 1970 had also named it as their freshman career choice in 1966. The stability rates of the other health professions were as follows: veterinarian, 58.8 percent; pharmacist, 50.1 percent; dentist, 47.4 percent; and optometrist, 11.6 percent (Holmstrom, 1974b, Table II-1). Many of the students who, at the time of college entry, aspired to one health profession named another as their career choice four years later; this was particularly true of those initially planning to become physicians; somewhat true for those initially planning to become dentists, veterinarians, or pharmacists; but not true for those initially planning to become optometrists.

Thus, we may expect that many of the aspiring health professionals studied here will change their career goals at some point. They will do so for a variety of reasons. Some may discover that they are not really interested in the career or that the preparation involved is too arduous and difficult for them. Others may change their goals in accordance with perceived changes in the job market. Such factors are, to a considerable extent, beyond the control of institutional and other policy-makers. But many students may fail to realize their freshman career goals because of structural or institutional barriers. Thus, some may change because they find themselves in institutions that do not offer a program or a major relevant to their career interests. Others, particularly those who initially enrolled in two-year colleges, will have the problem of transferring to a four-year college before they can attain the baccalaureate and become eligible for professional school. Some students may downgrade their career goals because of simple lack of money. Women and minority students may become discouraged because they are made to feel that their career choice is atypical for their sex or racial/ethnic group. For instance, two-thirds of the women who, as freshmen, were interested in becoming optometrists and 57 percent of those interested in dentistry enrolled in two-year colleges; it is possible that for a variety of reasons suggested above, these women will become dental hygienists or technicians. Indeed, aspiring health professionals who initially attend two-year colleges may be assumed to be the prime group to lower or otherwise change their career aspirations during the college years.

CHAPTER II - ASPIRING PHYSICIANS

HIGHLIGHTS

- In the fall of 1974, 59,706 first-time, full-time freshmen (3.6 percent of the total entering class) named medicine as their career choice. This represents an increase of 22 percent over 1966 in the number of aspiring physicians; the increase was greatest among women (131.9 percent) and blacks (102.3 percent); the number of nonblack men registered a slight decrease (2.4 percent). But even though medicine as a career choice became more popular among women and blacks over the eight-year period, it was still predominantly male (67.2 percent) and nonblack (91.5 percent).

- The typical aspiring physician, in 1974 as in 1966, was an 18-year-old white man whose parents were affluent and well-educated, who felt little anxiety over his ability to pay for a college education, and who expected considerable financial support from his parents. He was highly self-confident, seeing himself as both intellectually and socially able; he had a strong achievement drive, giving high priority to becoming an authority in his field and winning recognition from his colleagues; and he emphasized altruistic over material values, especially helping others and making a contribution to society. He was more likely than were other freshmen to enroll at a private university, where the likelihood of his majoring in a field congruent with his career plans (e.g., premedicine) was higher. His degree and study field plans were consistent with his career choice, suggesting that he has a good chance of realizing his freshman goals.

- Blacks planning to become physicians were slightly older, somewhat less confident of their academic abilities, but even more sure of themselves socially than were their nonblack counterparts. They were substantially more likely to see themselves as understanding other people. Their median parental income was only about half that reported by nonblacks, however, and they were twice as likely to be worried about their ability to pay for college. Their life goals as well as their reasons for career choice show them to be more concerned with financial success and with status, though they too were highly altruistic and achievement-oriented in their values. They tended to enroll in four-year colleges, a category that includes most predominantly black institutions. Their institutional attendance patterns, degree aspirations, and financial uncertainties suggest that their career plans may be somewhat unrealistic, compared with those of white males.

- Women aspiring to become physicians were, like the men, altruistic and people-oriented, but at the same time they had a marked desire to succeed in their careers. They were more likely than was the average female freshman to see themselves as original and intellectually self-confident leaders with a strong desire to achieve, though the black women were less likely than were the nonblacks to rate themselves high on academic and mathematical ability. The nonblack women came from relatively affluent and well-educated families, whereas the black women came from lower socioeconomic backgrounds, expected very little financial support from their parents, and were more apt to be concerned over their ability to pay for college. About one in ten female aspiring physicians, both black and nonblack, enrolled in a two-year college; and about one in five planned to major in an inappropriate field. The difficulties connected with transferring to a baccalaureate-granting institution and with making up prerequisite courses suggest that many of these women may have to lower their career aspirations and become health technicians or nurses instead of physicians.

General Characteristics

In the fall of 1974, at the time they entered college, 59,706 first-time, full-time freshmen (3.6 percent) named medicine as their probable future occupation. This group (for convenience referred to as aspiring physicians) is described here, and where appropriate compared with corresponding groups from two earlier freshman classes, 1966 and 1972. In addition, comparisons are occasionally made between aspiring physicians and all 1974 entering freshmen, as reported in the national norms (Astin et al., 1974). Table II-1 shows the number of aspiring physicians by sex and race/ethnicity (nonblack and black), in all three freshman classes.

Table II-1

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Physicians, by Race and Sex

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	37,897	2,244	40,141	16,708	2,857	19,565	54,605	5,101	59,706
1972	44,507	2,301	46,808	13,360	1,924	15,284	57,867	4,225	62,092
1966	38,819	1,677	40,496	7,593	844	8,437	46,412	2,521	48,933

The following sections profile aspiring physicians in terms of their demographic and background characteristics, self-ratings, and life goals.

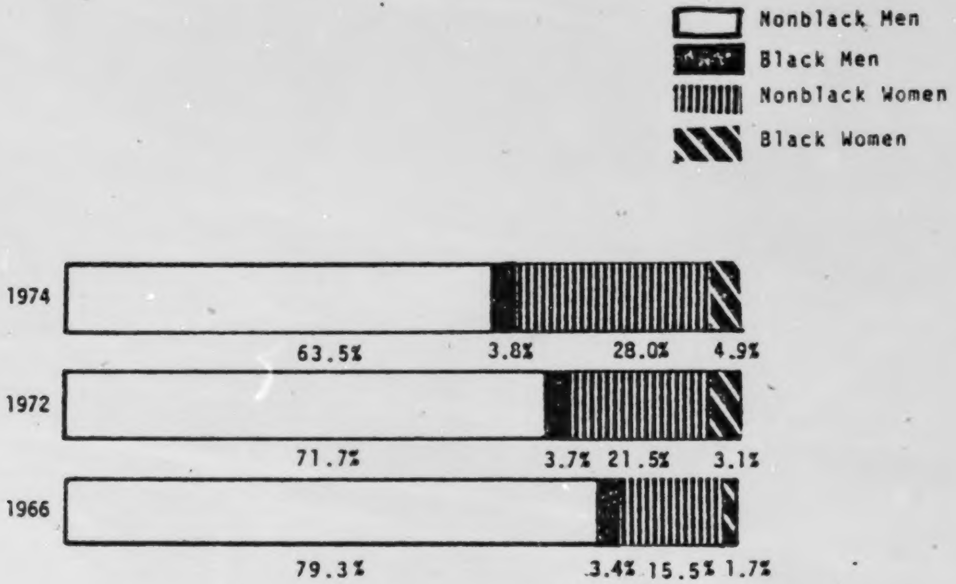
Sex and Race/Ethnicity

Since 1966 medicine has become an increasingly popular career choice with women and blacks. The proportion of women among aspiring physicians jumped from 17.2 percent in 1966 to

32.8 percent in 1974, an increase of 131.9 percent in absolute numbers, and the proportion of blacks jumped from 5.1 percent to 8.5 percent, a 102.3 percent increase. Nonetheless, in 1974 the group of aspiring physicians was still predominantly male (67.2 percent) and nonblack (91.5 percent) (Figure II-1).

FIGURE II-1

Race and Sex Distribution of 1966, 1972, and 1974 Freshmen Aspiring to Become Physicians



Among blacks, women accounted for most of the growth rate. In 1966, only one in three blacks planning a career in medicine was a woman, compared with over one out of two (56 percent) in 1974; the increase in absolute numbers was 238.5 percent. The number of black men interested in becoming physicians increased by 33.8 percent over the eight-year period, whereas the number of nonblack men increased by 14.7 percent between 1966 and 1972, but then dropped by 14.7 percent between 1972 and 1974, for a slight decline over the total period.

About one-tenth of the aspiring physicians identified as nonblack belonged to a racial/ethnic minority. Of this group, 29.9 percent (1,409) were Oriental, 29 percent (1,367) were "other," 15.3 percent (723) were Puerto Rican, 14.3 percent (675) were Mexican-American, and 11.5 percent (542) were American Indian.[1] The absolute number of nonblack minority students aspiring to become physicians increased dramatically between 1966 and 1974: 447.5 percent for American Indians, 177.9 percent for Orientals, and 34.2 percent for "other" minorities (1966 data are not available for Mexican-Americans and Puerto Ricans). Thus, the increases in the number of women and of minority students more than compensated for losses in the numbers of nonblack men, with the result that the freshman career choice of medicine registered an overall growth rate of 22 percent between 1966 and 1974.

Age and Marital/Dating Status

Like most freshmen planning on a career in the health professions, the typical aspiring physician entered college at age 18, directly after high school graduation (Tables II-2 and II-3). Of this group, only black men showed a tendency to delay college entry and thus also tended to be slightly older than average. Women, and particularly black women, who planned to become physicians tended to be slightly younger than female freshmen-in-general.

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[1] These nonblack minority groups are discussed in greater detail in the third report of the series.

Table II-2

Age Distribution, by Race and Sex--1974 Aspiring Physicians

Age, as of 31 December, 1974	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
16 or younger	.3	.6	.3	.8	2.4	1.0	.5	1.6	.6
17	5.7	7.9	5.9	11.0	15.1	11.7	7.4	12.0	7.8
18	78.4	63.2	77.2	76.4	67.7	75.1	77.5	65.7	76.5
19	14.1	21.3	14.5	10.1	10.9	10.3	12.9	15.5	13.1
20	1.1	1.5	1.1	.6	2.1	.9	.9	1.8	1.0
21 or older	.7	5.5	1.0	1.0	1.8	1.1	.8	3.4	1.0

Table II-3

High School Graduation Year/Status, by Race and Sex--1974 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Graduated 1974	97.1	89.6	96.7	96.3	95.4	96.1	96.9	92.8	96.5
Graduated 1973	1.3	1.6	1.3	1.1	1.0	1.1	1.2	1.2	1.2
Graduated 1972	.5	2.6	.7	.4	1.1	.5	.5	1.7	.6
Graduated 1971 or earlier	.3	2.6	.5	.5	.5	.5	.4	1.6	.5
Passed G.E.D. test	.2	---	.2	.6	.7	.6	.3	.4	.3
Never completed high school	.5	3.7	.7	1.1	1.4	1.1	.7	2.4	.8

Given the youth of the aspiring physicians, it is not surprising that fewer than 1 percent were married at the time of college entry (Table II-4). About three in ten were engaged or going steady; close to half said they were dating several people; and only one in five reported they had not dated in recent months. There were no discernible differences between the 1974, 1972, and 1966 aspiring physicians with respect to age and marital/dating status at college entry; therefore, no data are shown.

Table II-4

Marital/Dating Status, by Race and Sex--1974 Aspiring Physicians

Marital/Dating Status	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Presently married	.5	3.0	.7	.5	.4	.5	.5	1.5	.6
Presently engaged	1.6	2.5	1.6	1.2	2.8	1.4	1.5	2.7	1.6
Have been seeing one person exclusively	30.9	24.9	30.6	24.6	37.4	26.4	29.0	31.8	29.3
Have been seeing several persons, but no one exclusively	47.3	54.1	47.7	46.8	35.0	45.1	47.2	43.5	46.8
Have not been dating in recent months	19.6	15.6	19.4	27.0	24.5	26.6	21.8	20.5	21.7

Socioeconomic Background

Aspiring physicians came from fairly affluent and educated backgrounds (Table II-5). In 1974, they reported a median parental income of $17,749, a figure that is $3,361 greater than the median parental income for the entire 1974 entering freshman class.

Table II-5

Parental Income (1973), by Race and Sex--1974 Aspiring Physicians

Parental Income (1973)	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Less than $3,000	1.3	6.2	1.6	1.9	8.1	2.8	1.5	7.3	2.0
$3,000 - $3,999	1.2	10.6	1.7	1.7	6.0	2.4	1.3	8.1	1.9
$4,000 - $5,999	2.3	7.0	2.6	3.9	14.7	5.5	2.8	11.3	3.5
$6,000 - $7,999	3.2	15.7	3.9	4.4	13.3	5.7	3.6	14.3	4.5
$8,000 - $9,999	5.2	12.6	5.6	4.9	10.7	5.8	5.2	11.5	5.7
$10,000 - $12,499	11.6	13.5	11.7	12.2	13.9	12.3	11.7	13.7	11.9
$12,500 - $14,999	11.7	4.4	11.2	12.3	7.1	11.5	11.8	5.9	11.3
$15,000 - $19,999	17.2	11.5	16.9	17.1	9.8	16.0	17.2	10.5	16.6
$20,000 - $24,999	14.3	6.3	13.8	13.9	6.5	12.9	14.2	6.4	13.5
$25,000 - $29,999	7.6	4.3	7.4	7.7	3.9	7.1	7.6	4.1	7.3
$30,000 - $34,999	6.0	3.5	5.9	5.6	3.6	5.3	5.9	3.6	5.7
$35,000 - $39,999	4.0	2.0	3.9	3.4	.6	3.0	3.8	1.2	3.6
$40,000 - $49,999	3.9	.5	3.7	3.4	1.0	3.0	3.8	.8	3.5
$50,000 or more	10.5	2.9	10.1	7.7	.8	6.6	9.7	1.4	6.9
MEDIAN	$18,933	$9,681	$18,452	$17,562	$9,463	$16,250	$18,549	$9,565	$17,749

Blacks who planned to become physicians came from significantly less affluent backgrounds, reporting a median parental income that was $8,984 lower than that reported by nonblacks in the aspiring physician group. When the median incomes for 1966, 1972, and 1974 are converted into 1966 constant dollars, as deflated by the Consumer Price Index, one finds surprisingly little change in the parental incomes reported by aspiring physicians, the only exception being that the median parental income reported by black students dropped slightly (Table II-6).

Table II-6

Median Parental Income in Constant Dollars,[a] by Race and Sex--1974, 1972, and 1966 Aspiring Physicians

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	$12,903	$6,615	$12,604	$11,996	$6,464	$11,100	$12,670	$6,533	$11,919
1972	$12,775	$6,905	$12,440	$11,137	$6,992	$10,679	$12,443	$6,959	$11,981
1966	$12,492	$7,360	$12,276	$11,287	$7,185	$10,774	$12,306	$7,307	$12,032

[a] Median parental income figures are in fiscal 1966 constant dollars as deflated by the Consumer Price Index.

Nearly half the aspiring physicians reported that their fathers had at least graduated from college; one-fourth reported that their fathers had a graduate degree, compared with only 12 percent of all 1974 entering freshmen (Table II-7). The fathers of blacks in the aspiring physician group tended to be less educated than did fathers of nonblacks: About one in four black men and three in ten black women said their fathers had a college degree.

Table II-7

Father's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Physicians

Father's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	4.7	17.9	5.4	5.1	12.1	6.0	4.8	14.7	5.6
Some high school	7.3	20.2	8.0	8.6	14.5	9.4	7.7	17.1	8.3
High school graduate	20.2	19.0	20.1	18.4	25.3	19.3	19.6	22.5	19.9
Postsecondary school other than college	4.0	1.5	3.9	4.1	3.3	4.0	4.0	2.5	3.9
Some college	14.0	14.8	14.0	14.8	15.2	14.8	14.2	15.0	14.3
College degree	21.0	9.3	20.4	20.5	12.3	19.4	20.9	11.0	20.0
Some graduate school	3.4	3.5	3.4	3.5	2.6	3.4	3.4	3.0	3.4
Graduate degree	25.4	13.8	24.7	25.1	14.6	23.7	25.3	14.2	24.4
1972:									
Grammar school or less	4.3	17.3	4.9	5.3	16.2	6.5	4.6	16.3	5.3
Some high school	8.7	14.8	9.0	8.4	22.5	10.0	8.6	18.3	9.3
High school graduate	22.1	25.1	22.3	20.8	23.5	21.1	21.8	24.9	22.0
Some college	17.3	18.7	17.4	17.2	11.5	16.5	17.3	15.9	17.2
College degree	18.9	8.4	18.5	19.5	15.5	19.0	19.1	11.7	18.4
Some graduate school	4.8	2.3	3.9	4.8	1.7	4.3	4.1	2.0	4.0
Graduate degree	24.6	11.4	24.0	24.3	10.1	22.6	24.6	10.8	23.7
1966:									
Grammar school or less	4.3	13.9	4.7	5.5	11.0	6.1	4.5	13.0	4.9
Some high school	10.1	19.8	10.6	10.2	24.2	11.5	10.1	21.3	10.7
High school graduate	22.0	19.8	21.9	21.5	27.4	22.0	21.9	22.3	21.9
Some college	19.5	15.1	19.3	20.9	10.9	20.0	19.7	13.7	19.4
College degree	20.9	11.6	20.5	20.8	11.8	19.9	20.9	11.7	20.4
Postgraduate degree	23.3	19.8	23.1	21.2	14.6	20.5	22.9	18.1	22.7

The educational level of the mothers of aspiring physicians was generally lower than that of the fathers but higher than that of the mothers of freshmen-in-general (Table II-8). Thus, 30.2 percent of the aspiring physicians reported that their mothers had a college education or better, compared with 20.2 percent of all freshmen. The racial difference with respect to education was less evident among mothers than among the fathers of aspiring physicians: 30.6 percent of the nonblacks and 26.1 percent of the blacks said their mothers had at least received the baccalaureate. The educational level of the parents rose only slightly over the eight-year period covered by the study.

Table II-8

Mother's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Physicians

Mother's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	2.7	8.1	3.0	3.7	8.3	4.4	3.0	8.3	3.5
Some high school	7.2	23.9	8.3	7.6	13.4	8.4	7.6	18.0	8.3
High school graduate	33.5	21.2	32.8	30.8	27.6	30.3	32.7	24.8	32.0
Postsecondary school other than college	8.4	3.7	8.2	8.7	6.8	8.4	8.5	5.5	8.2
Some college	17.8	15.3	17.6	18.0	19.0	18.1	17.8	17.3	17.8
College degree	18.3	13.8	18.1	18.2	17.8	17.4	18.3	13.2	17.8
Some graduate school	3.5	3.5	3.5	4.5	3.6	4.4	3.8	3.5	3.8
Graduate degree	8.4	10.5	8.5	8.6	8.4	8.6	8.5	9.4	8.6
1972:									
Grammar school or less	3.8	7.4	3.9	3.7	7.8	4.1	3.7	7.2	4.0
Some high school	7.4	19.3	7.9	8.6	20.2	10.0	7.6	19.7	8.4
High school graduate	37.8	28.0	37.3	33.6	28.9	33.0	36.8	28.4	36.2
Some college	21.2	18.9	21.1	22.6	18.8	22.1	21.5	18.9	21.3
College degree	18.8	16.8	18.7	18.2	11.4	17.3	18.6	14.3	18.3
Some graduate school	4.2	4.0	4.2	4.4	3.5	4.3	4.3	3.8	4.2
Graduate degree	7.8	5.7	6.9	9.1	10.2	9.2	7.5	7.8	7.5
1966:									
Grammar school or less	3.4	9.7	3.7	3.3	7.7	3.7	3.4	9.1	3.7
Some high school	7.9	12.9	8.1	10.3	17.4	11.0	8.3	14.4	8.6
High school graduate	37.4	27.4	37.0	35.8	22.8	34.5	37.2	25.9	36.6
Some college	24.3	16.3	23.9	26.1	20.1	25.5	24.6	17.6	20.2
College degree	21.8	20.2	21.8	18.4	17.4	18.3	21.3	19.3	21.2
Postgraduate degree	5.2	13.4	5.5	6.2	14.5	7.0	5.4	13.8	5.6

Consistent with their education, nearly one-third of the fathers of aspiring physicians worked in professional-level occupations (e.g., health professions, law, engineering, scientific research); indeed, nearly one in ten of the nonblack aspiring physicians (10.1 percent of the men, 6.6 percent of the women), though only 2.8 percent of the black aspiring physicians, had fathers who were physicians; the comparable figure for all 1974 freshmen was only about 2 percent. In addition, three in ten of the aspiring physicians had fathers who were business managers, and only one-fifth had fathers who worked in skilled or unskilled trades (Table II-9).

Table II-9

Father's Occupation, by Race and Sex--1974 Aspiring Physicians

Father's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	10.1	2.4	9.7	6.6	3.0	6.1	9.0	2.8	8.5
Dentist	1.4	1.5	1.4	.9	1.9	1.0	1.2	1.7	1.3
Pharmacist	.9	.7	.9	.5	.2	.5	.8	.4	.7
Optometrist	.3	.1	.3	.3	---	.3	.3	.0	.3
Veterinarian	.3	.2	.3	.3	.4	.3	.3	.3	.3
Nurse	.1	.5	.1	.0	1.9	.3	.0	1.3	.1
Home economist/dietician	---	---	---	.0	---	.0	.0	---	.0
Health technician or technologist	.1	.0	.1	.2	1.2	.3	.1	.7	.2
Therapist	.0	---	.0	.0	---	.0	.0	---	.0
Artist	.5	.7	.5	.8	.1	.7	.6	.4	.6
Business manager	31.2	8.4	30.1	27.0	14.2	25.3	30.0	11.7	28.5
Clergy	1.2	1.7	1.3	1.4	1.3	1.4	1.3	1.5	1.3
Educator (college)	1.2	2.4	1.3	1.6	1.1	1.6	1.4	1.7	1.4
Educator (secondary)	2.0	3.8	2.1	2.5	2.4	2.5	2.2	3.0	2.2
Educator (elementary)	.6	1.7	.7	.9	1.1	1.0	.7	1.4	.8
Education (special)	.5	1.4	.5	.6	.9	.7	.5	1.1	.6
Engineer	8.5	5.3	8.3	9.8	1.8	8.7	8.9	3.4	8.4
Farmer/forester	2.3	1.3	2.3	3.0	1.0	2.8	2.5	1.1	2.4
Lawyer	2.4	.6	2.3	2.5	.8	2.3	2.4	.7	2.3
Research scientist	.8	.2	.9	1.4	.2	1.3	1.1	.2	1.0
Skilled worker	14.5	14.3	14.5	14.5	19.6	15.2	14.5	17.2	14.7
Unskilled worker	5.4	23.1	6.3	5.3	14.6	6.5	5.4	18.3	6.3
Other professional[a]	3.2	3.5	3.3	4.4	7.3	4.8	3.6	5.6	3.8
Other nonprofessional[b]	11.3	21.5	11.8	13.7	20.1	14.5	12.0	20.7	12.7
Unemployed	1.0	4.7	1.2	1.7	4.9	2.2	1.3	4.8	1.5

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

Nearly one in ten aspiring physicians reported that their mothers worked in a health field, and another one in ten said they were teachers (Table II-10). Of the aspiring physicians, blacks were more likely to have mothers who worked in health fields than were nonblacks (14.4 percent and 8.6 percent, respectively).

Table II-30

Mother's Occupation, by Race and Sex--1974 Aspiring Physicians

Mother's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.4	.2	.4	.8	.1	.7	.5	.2	.5
Dentist	.0	—	.0	.1	.1	.1	.0	.1	.1
Pharmacist	.3	—	.2	.1	—	.0	—	.2	—
Optometrist	.0	—	.0	.0	.4	.1	.0	.2	.0
Veterinarian	—	—	—	—	—	—	—	—	—
Nurse	7.0	14.4	7.4	6.7	9.7	7.2	6.9	11.8	7.3
Home economist/dietician	.4	.5	.4	.4	.8	.4	.4	.7	.4
Health technician or technologist	.5	1.1	.5	.8	1.3	.9	.6	1.2	.6
Therapist	.3	—	.2	.1	.0	.1	.2	.0	.2
Artist	.6	.2	.6	1.3	.2	1.1	.8	.2	.7
Business manager	8.2	5.3	8.1	7.5	6.7	7.3	8.0	6.0	7.8
Clergy	.1	.1	.1	.1	—	.1	.1	.0	.1
Educator (college)	.5	.9	.6	1.0	1.2	1.0	.7	1.0	.7
Educator (secondary)	2.5	3.0	2.7	3.1	3.1	3.1	2.8	3.1	2.8
Educator (elementary)	4.4	7.3	4.5	5.1	7.0	5.4	4.6	7.1	4.8
Education (special)	1.6	4.4	1.8	1.9	2.4	2.0	1.7	3.3	1.9
Engineer	.1	—	.1	.1	—	.1	.1	—	.1
Farmer/forester	.1	.0	.1	.1	—	.1	.1	.0	.1
Lawyer	.3	—	.2	.3	.2	.3	.3	.1	.2
Research scientist	.1	—	.1	.3	.0	.2	.2	.0	.1
Skilled worker	.9	1.3	.9	.9	1.1	.9	.9	1.2	.9
Unskilled worker	2.7	6.2	3.0	2.9	4.4	3.1	2.8	6.1	3.1
Other professional[a]	1.7	7.3	2.0	2.3	5.1	2.7	1.9	6.1	2.2
Other nonprofessional[b]	60.6	36.7	59.3	55.4	48.3	56.9	57.9	43.2	58.6
Unemployed	6.7	9.2	6.8	5.8	6.6	6.1	6.4	8.5	6.6

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

In summary, freshmen--especially nonblacks--interested in medicine as a career had relatively well-to-do, well-educated parents, who were themselves likely to be employed in health fields.

College Finances

Recent court decisions have ruled that parents are not necessarily required to contribute toward the college education of children who have reached the age of majority (Choate v. Choate, 189 S.E. 2d 647). With nearly four out of five states now designating 18 as the legal age of adulthood, and with federal student aid programs imposing a strict ceiling on federal student aid funds, the proportion of students who claimed "financial independence" was 18.2 percent in 1974, ranging from slightly over one in ten of those freshmen enrolling in universities to fully one in four of those enrolling in two-year colleges.

Not surprisingly, only about one in ten aspiring physicians claimed to be financially independent at the time of college entry (Table II-11). Women were less likely than were men to be financially independent at college entry (8.8 percent versus 12.1 percent). Blacks, however, were twice as likely as nonblacks to say they were financially independent from their parents (20 percent versus 10.2 percent).

Table II-11

Financial Independence from Parents, by Race and Sex--1974 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Financial independence THIS year:									
No	88.8	72.8	87.9	92.1	85.8	91.2	89.8	80.0	89.0
Yes	11.2	27.2	12.1	7.9	14.2	8.8	10.2	20.0	11.0
Financial independence LAST year:									
No	93.4	78.7	92.6	95.3	86.6	94.0	94.0	83.0	93.0
Yes	6.6	21.3	7.4	4.8	13.4	6.0	6.1	17.0	7.0

One item on the SIF asked entering freshmen to indicate what sources, and in what amounts, they expected to draw on to finance their first year of college. Table II-12 shows the proportions and median amounts for each source. Like most other students, a great majority (80.4 percent) of aspiring physicians expected to rely on their parents to help finance their first year in college. Nonblacks were more likely than were blacks to get support from parents (81.7 percent versus 66.8 percent); further, nonblacks expected to receive, on the average, nearly three times as much money as blacks ($1,671 versus $563). Among blacks, men expected

Table II-12

Anticipated Sources and Amounts of Financial Support for First Year of College, by Race and Sex--1974 Aspiring Physicians

		Men			Women			Total		
		Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Parental, or family aid or gifts	%	81.1	65.9	80.2	83.1	67.3	80.8	81.7	66.8	80.4
	(Medn.)	$1,690	$740	$1,641	$1,630	$324	$1,479	$1,671	$563	$1,590
Basic Educational Opportunity Grants	%	14.4	48.0	25.3	14.6	41.0	18.5	14.5	44.0	17.0
	(Medn.)	$652	$781	$674	$590	$758	$646	$632	$769	$664
Supplemental Educational Opportunity Grants	%	3.7	12.5	4.2	4.8	13.6	6.1	4.0	13.1	4.8
	(Medn.)	$616	$683	$624	$605	$700	$639	$612	$684	$630
College Work-Study grant	%	7.5	24.5	8.5	10.7	18.3	14.6	8.5	21.0	9.5
	(Medn.)	$425	$503	$436	$515	$484	$483	$455	$493	$462
State scholarship or grant	%	15.1	20.0	15.4	20.6	16.9	20.1	16.8	18.3	15.6
	(Medn.)	$656	$835	$673	$617	$877	$656	$642	$861	$663
Local or private scholarship or grant	%	19.8	18.4	19.7	27.7	21.1	26.7	22.2	19.9	22.0
	(Medn.)	$613	$936	$626	$574	$949	$607	$599	$943	$619
Federal Guaranteed Student Loan	%	8.8	10.1	8.8	7.4	9.6	7.7	8.3	9.8	8.5
	(Medn.)	$1,054	$785	$1,036	$1,042	$750	$981	$1,051	$768	$1,017
National Direct Student Loan	%	7.9	19.2	8.5	10.6	18.1	11.7	8.7	18.6	9.6
	(Medn.)	$710	$632	$699	$667	$649	$663	$694	$640	$685
Other loan	%	3.9	4.8	4.0	4.7	4.6	5.0	4.2	5.8	4.3
	(Medn.)	$1,097	$874	$1,076	$1,184	$1,492	$1,240	$1,126	$1,211	$1,134
Full-time work	%	6.3	6.2	6.3	4.6	3.6	4.4	5.0	4.7	5.7
	(Medn.)	$605	$630	$608	$515	$430	$499	$582	$530	$578
Part-time or summer work	%	59.7	40.3	58.6	56.8	40.5	54.4	58.8	40.4	57.2
	(Medn.)	$500	$378	$493	$358	$300	$351	$447	$329	$438
Savings	%	45.5	22.1	44.2	44.6	22.1	41.3	45.2	22.1	43.2
	(Medn.)	$405	$364	$403	$352	$300	$348	$387	$325	$384
Spouse	%	.5	.4	.5	.4	1.3	.5	.5	.9	.5
	(Medn.)	$1,093	$449	$1,083	$313	$600	$383	$640	$600	$613
Your G.I. benefits	%	.6	.7	.6	.0	.5	.1	.4	.5	.4
	(Medn.)	$3,149	$528	$2,241	$0	$250	$250	$2,437	$368	$2,115
Your parent's G.I. benefits	%	.9	1.5	.9	1.2	1.4	1.2	1.0	1.5	1.0
	(Medn.)	$370	$804	$401	$466	$393	$452	$401	$663	$419
Social security dependent's benefits	%	4.1	5.8	4.2	5.0	8.0	5.5	4.4	7.0	4.6
	(Medn.)	$530	$373	$497	$498	$292	$432	$517	$316	$469
Other	%	3.8	5.5	3.9	2.8	6.3	3.0	3.5	4.8	3.6
	(Medn.)	$999	$1,888	$1,093	$552	$685	$584	$878	$993	$893

to receive twice as many dollars as did women ($740 versus $324). These racial and sex differences persist when one divides the median amount expected from parents by the median parental income for each group of aspiring physicians. Overall, parents were expected to contribute 9 percent of their annual incomes toward supporting the aspiring physician's first year of college. Black women, however, expected to receive only 3.4 percent of the parental income in support.

Although blacks were disadvantaged with respect to parental support, they were more likely than were nonblacks to benefit from federal and state scholarship programs. Forty-four percent of the black but only 14.5 percent of the nonblack aspiring physicians expected to receive a Basic Educational Opportunity Grant (BEOG). Further, the average BEOG award was higher for blacks ($769) than for nonblacks ($632).

Blacks were also more likely to get Supplemental Educational Opportunity Grants (SEOG) (13.1 percent versus 4 percent) and to participate in the College Work-Study (CWS) program (21 percent versus 8.5 percent). In both cases, the average grants were larger for blacks ($684 and $493, respectively) than for nonblacks ($612 and $455, respectively). Thus the federal student aid programs may be said to compensate partially for the disadvantaged socioeconomic status of blacks.

Blacks also benefited somewhat from state scholarships, which went to 20 percent of black but 15.1 percent of nonblack men, and conversely to 20.6 percent of nonblack but 16.9 percent of black women. For both sexes, blacks received, on the average, larger scholarships than did nonblacks. Women were more likely to receive local or private scholarships than were men (26.7 percent versus 19.7 percent), although nonblack men received slightly larger scholarships than their female counterparts.

As was true for freshmen-in-general, very few aspiring physicians expected to take a loan of some kind (Federally Insured Student Loan, National Direct Student Loan, other loan) to finance their freshman year; the largest proportion was 19.2 percent of black men who expected to borrow through the NDSL program. The estimated median amount of loans taken by aspiring physicians ranged from a high of $1,492 to a minimum of $640--formidable amounts when multiplied by four years of college, particularly for students planning to go to medical school, where the average indebtedness at the time of graduation from medical school can be more than $3,000 (Holmstrom and Sharp, 1972).[2]

Nearly three-fifths of the aspiring physicians, in contrast to a full 70 percent of the entire freshman class, expected to work part time or during the summer to finance their freshman year. Nonblacks were more likely than were blacks to cite this as a source of finances. Full-time employment was contemplated by only 5.7 percent of the aspiring physicians, in contrast to 11.4 percent of the entire freshman class. Over two-fifths

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[2] Generally, students of medicine, osteopathy, and dentistry tend to borrow larger amounts than do students of veterinary medicine and pharmacy (U.S. DHEW,1973).

(45.2 percent of nonblacks but only 22.1 percent of blacks) expected to dip into their savings to finance their freshman year; the national average was again much higher (53.6 percent).

Finally, only very small proportions of aspiring physicians or of freshmen-in-general expected to draw on G.I. benefits, Social Security benefits, support from spouse, and other sources. Basically, the major source of finance for this group, as for the less affluent total freshman class, was parental support.

The differences in sources of financial support were reflected in responses to a question about degree of concern over ability to finance a college education. Blacks were more likely than were nonblacks (32.6 percent versus 15.2 percent) and women more likely than men (22.2 percent versus 14 percent) to express major concern (Table II-13). Indeed, over one in three black women (36 percent) apparently felt considerable doubt about her financial ability to complete undergraduate training. Moreover, the proportion of all aspiring physicians to express a major concern over finances jumped dramatically from the 1966 level of only 16.8 percent of the blacks and 6.2 percent of the nonblacks.[3] A similar jump in the proportion expressing major concern occurred among freshmen-in-general: from 8.6 percent in 1966 to 14.7 percent in 1974.

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[3] This increase in concern over ability to pay for a college education is probably attributable to the rising costs of college attendance. In 1966, the average amount for tuition, room, and board was $1,026 at public institutions and $2,124 at private institutions; in 1974, the corresponding figures were $1,708 and $3,592 (Simon & Frankel, 1976).

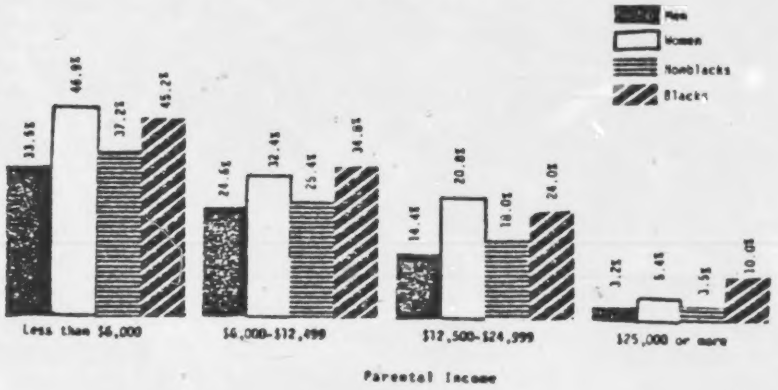
Table II-13

Concern Over Financing College Education, by Race and Sex--1974, 1972, and 1966 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
No concern	39.5	24.8	38.7	27.9	16.3	26.2	36.0	20.0	34.7
Some concern	47.3	47.0	47.3	52.2	47.7	51.6	48.8	47.4	48.7
Major concern	13.2	28.2	14.0	19.8	36.0	22.2	15.2	32.6	16.7
1972:									
No concern	36.1	23.7	35.5	27.3	18.2	26.1	34.1	21.2	33.2
Some concern	50.2	47.5	50.1	54.9	46.6	53.8	51.3	47.1	51.0
Major concern	13.7	28.8	14.4	17.8	35.3	20.0	14.6	31.8	15.8
1966:									
No concern	39.3	26.9	38.8	31.6	24.2	30.9	38.1	26.0	37.5
Some concern	55.1	55.2	55.1	59.3	61.1	59.5	55.7	57.2	55.8
Major concern	5.6	17.9	6.1	9.1	14.7	9.7	6.2	16.8	6.7

Concern over ability to pay for college was, of course, related to parental income as well as to sex and race/ethnicity: Aspiring physicians whose parental incomes were below $6,000 were more likely to express concern than were those from higher income levels (Figure II-2). As mentioned earlier, blacks, and particularly black women, were more likely to be concerned over ability to meet expenses (Figure II-3). In 1974, the median parental income for black women who planned to become physicians was only $218 less than that of their male counterparts (see Table II-5), but black

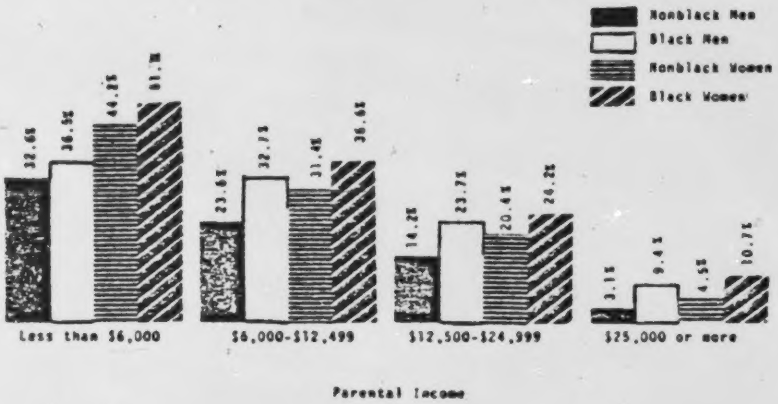
FIGURE II-2
Proportion Reporting Major Concern Over Financing College Education, by Sex, by Race, and by Parental Income--1974 Aspiring Physicians



men expected to receive somewhat larger amounts from their parents as well as from the BEOG and CWS programs and state scholarships.

FIGURE II-3

Proportion Reporting Major Concern Over Financing College Education, by Race and Sex, and by Parental Income--1974 Aspiring Physicians



Self-Ratings

Asked to rate themselves on a variety of traits as "compared with the average student of your own age," aspiring physicians ex-

Table II-14

Self-Ratings,[a] by Race and Sex--1974 Aspiring Physicians and All Freshmen

Trait	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Academic ability	86.4	62.6	85.1	87.6	65.5	84.4	86.8	64.2	84.8	53.0
Athletic ability	52.3	48.8	52.1	33.1	27.4	32.3	46.5	36.7	45.7	38.5
Artistic ability	20.1	16.0	20.0	25.2	20.3	24.5	21.7	18.5	21.5	19.5
Cheerfulness	54.2	55.2	54.2	62.8	66.1	63.3	56.8	61.4	57.2	52.2
Defensiveness	28.2	35.6	28.5	28.1	34.1	29.0	28.1	34.8	28.6	27.1
Drive to achieve	80.7	72.1	80.2	88.1	86.1	87.8	83.0	80.0	82.7	59.9
Leadership ability	61.1	56.6	60.9	56.1	52.0	55.4	59.6	54.0	59.1	41.3
Mathematical ability	66.6	39.7	65.2	61.5	37.3	57.9	65.1	38.3	62.8	33.4
Mechanical ability	41.0	25.8	40.1	18.5	9.9	16.1	34.1	20.4	33.0	23.8
Originality	49.2	42.3	48.8	47.9	56.6	49.1	48.8	50.4	48.9	37.4
Physical attractiveness	36.1	34.4	36.0	30.2	39.2	31.4	34.3	37.0	34.5	26.1
Political conservatism	17.3	11.4	17.0	13.1	7.0	12.2	16.0	9.0	15.2	10.5
Political liberalism	27.7	34.8	28.1	26.4	25.1	26.2	27.3	29.4	27.5	20.1
Popularity	42.7	39.9	42.5	34.1	41.1	35.1	40.0	40.6	40.1	30.2
Popularity with opposite sex	39.5	47.4	39.9	29.4	44.2	31.6	36.4	45.6	37.2	29.4
Public speaking ability	35.4	34.8	35.4	31.4	34.1	31.8	34.3	34.4	34.2	20.7
Intellectual self-confidence	68.6	66.1	68.5	67.0	57.4	65.5	68.2	61.2	67.5	40.7
Social self-confidence	46.8	57.6	47.4	39.3	47.5	40.5	44.5	52.2	45.1	33.9
Sensitivity to criticism	26.3	19.0	25.9	31.8	25.1	30.8	27.9	22.4	27.5	25.1
Stubbornness	38.9	31.3	38.5	48.3	32.9	47.7	42.1	32.6	41.5	34.9
Understanding of others	71.3	79.8	71.8	79.8	80.3	79.8	73.9	80.1	74.4	66.9
Writing ability	44.4	34.8	43.9	48.3	46.8	48.5	45.8	41.5	45.4	30.5

[a] Self-rating of "above average" or "highest 10 percent" in comparison with "the average student of your own age."

pressed a highly positive self-image, particularly on qualities relating to intellectual ability and achievement (Table II-14). Thus, substantially larger proportions of aspiring physicians than of all entering freshmen ranked themselves above average or in the top 10 percent on the following traits: academic ability (84.8 percent of aspiring physicians versus 53 percent of freshmen-in-general), drive to achieve (82.7 percent versus 59.9 percent), intellectual self-confidence (67.5 percent versus 40.7 percent), mathematical ability (62.8 percent versus 33.4 percent), leadership ability (59.1 percent versus 41.3 percent), originality (48.9 percent versus 37.4 percent), writing ability (45.4 percent versus 30.5 percent), social self-confidence (45.1 percent versus 33.9 percent), and public speaking ability (34.2 percent versus 20.7 percent). In short, aspiring physicians tended to see themselves as strong in those qualities that suggest dominance and success in a competitive academic setting. Somewhat larger proportions of aspiring physicians than of freshmen-in-general also gave themselves high marks on a number of other traits, including athletic ability, mechanical ability, physical attractiveness, political conservatism, political liberalism, popularity with the opposite sex, stubbornness, and understanding of others. (It should be noted that most students--74.4 percent of aspiring physicians, 65.9 percent of all freshmen--saw themselves as above average on this last trait.) On only a few traits--artistic ability, defensiveness, sensitivity to criticism--did approximately equal proportions of aspiring physicians and of freshmen-in-general give themselves high ratings--and the last two traits can hardly be regarded as virtues.

Women who planned to become physicians were much more likely than were all female freshmen to see themselves as achievement-oriented, intellectually self-confident, and superior in leadership ability, mathematical ability, and public speaking ability. They were also more likely than were their male counterparts to say they were both cheerful and stubborn. Black women tended to give themselves high ratings on originality (56.6 percent, compared with only 42.3 percent of black men and 47.9 percent of nonblack women). Though nonblacks generally had higher self-ratings than did blacks, the reverse was true for the traits of defensiveness, social self-confidence, understanding of others, and popularity with the opposite sex; on the last trait, the racial difference was particularly marked among women, with 44.2 percent of the black women, compared with only 29.4 percent of the nonblack women, rating themselves high. Black men were particularly likely to see themselves as politically liberal. It would seem, then, that women and blacks who, at the time they enter college, aspire to become physicians are an unusually self-confident and committed group, compared with the general freshman population.

Life Goals

Respondents to the SIF were asked to indicate the importance they gave to a number of life goals (Table II-15). A majority of entering freshmen, and especially aspiring physicians, ranked as essential or very important the goals of helping other people in difficulty (81.9 percent of aspiring physicians versus 61.3 percent of freshmen-in-general), becoming an authority in one's field (72.4 percent versus 62.2 percent), and developing a meaningful philosophy of life (70.9 percent versus 61.1 percent). In addition, aspiring physicians were much more likely than were all

Table II-15

Life Goals,[a] by Race and Sex--1974 Aspiring Physicians and All Freshmen

Life Goal	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	8.2	11.1	8.4	10.2	7.8	9.7	8.8	9.2	8.8	11.4
Becoming an authority in my field	72.3	76.9	72.6	71.5	73.3	71.8	72.1	74.8	72.4	62.2
Obtaining recognition from my colleagues for contributions to my special field	47.9	59.0	48.5	42.7	45.2	43.2	46.4	51.2	46.8	39.0
Influencing the political structure	11.9	23.6	12.6	10.2	11.3	10.3	11.3	16.6	11.8	12.5
Influencing social values	25.0	39.0	25.8	28.3	32.5	28.9	26.1	35.4	26.8	27.2
Raising a family	57.5	61.9	57.8	42.4	51.1	43.7	52.9	55.9	53.1	55.0
Having administrative responsibility for the work of others	21.6	31.8	22.1	16.7	23.5	17.7	20.1	27.2	20.6	25.6
Being very well off financially	47.1	62.3	47.9	28.4	48.2	31.2	41.3	54.4	42.4	45.8
Helping others who are in difficulty	78.7	81.2	78.7	88.2	87.9	88.3	81.6	85.0	81.9	61.3
Making a theoretical contribution to science	39.7	47.6	40.2	41.4	48.7	42.5	40.3	48.2	40.9	13.0
Writing original works (poems, novels, short stories, etc.)	9.0	7.8	8.9	11.0	15.7	11.7	9.6	12.3	9.8	11.9
Creating artistic work (painting, sculpture, decorating, etc.)	7.1	6.9	7.0	11.0	9.0	10.7	8.2	8.1	8.2	13.9
Being successful in a business of my own	48.0	50.3	48.2	39.0	44.9	39.8	45.3	47.3	45.4	37.9
Becoming involved in programs to clean up the environment	26.3	32.5	26.7	25.6	23.4	25.4	26.1	27.4	26.3	25.9
Developing a meaningful philosophy of life	69.8	66.4	69.7	73.8	71.1	73.4	71.1	69.1	70.9	61.1
Participating in a community action program	31.0	39.9	31.5	38.0	41.9	38.6	33.1	41.0	33.8	27.5
Keeping up to date with political affairs	43.6	47.8	43.8	42.8	35.9	41.8	43.4	41.0	43.1	36.6

[a] Life goals rated as "very important" or "essential."

freshmen to give high priority to making a theoretical contribution to science (40.9 percent versus 13 percent), and somewhat more likely to be concerned with receiving recognition from colleagues (46.8 percent versus 39 percent), being successful in their own business (45.4 percent versus 37.9 percent), keeping up-to-date with political affairs (43.1 percent versus 36.6 percent), and participating in community action programs (33.8 percent versus 27.5 percent). On the other hand, overall, they were less likely than were freshmen-in-general to value having administrative responsibility over others (20.6 percent versus 25.6 percent); and they tended to give less emphasis to achievements in the performing arts, the graphic arts, and writing.

Within this general framework of values that distinguished aspiring physicians from other freshmen, there were some interesting deviations on the part of the different subgroups. For instance, black men tended to give high priority to more life goals than did others, which in some instances makes them more similar to the average freshman and in other instances marks them as farther from the norm. Thus, unusually large proportions of black male aspiring physicians (compared with other groups of aspiring physicians) said that it was essential or very important for them to be very well-off financially, raise a family, obtain recognition from colleagues, succeed in business, make a theoretical contribution to science, influence social values, help clean up the environment, have administrative responsibility over others, influence the political structure, and achieve in a performing art. Black women were more concerned than were nonblack women with being very well-off financially (48.2 percent versus 28.4 percent).

Women differed from men in the aspiring physician group in that larger proportions were concerned with helping others and with achieving artistically: Black women were more likely to want to write original works, nonblack women to create artistic works. Moreover, female aspiring physicians were much more likely than were female freshmen-in-general to value becoming an authority in a field (71.8 percent versus 57.7 percent), making a theoretical contribution to science (42.5 percent versus 10.2 percent), and succeeding in their own business (39.8 percent versus 27.5 percent). Black women especially valued the last two of these three goals. One final point distinguishes the woman who plans, at college entry, to become a physician: Though 56.9 percent of all freshman women felt that raising a family was very important or essential, among aspiring physicians only 51.1 percent of black women and 42.4 percent of nonblack women endorsed this goal. It would seem that women who aspire to become physicians may to some extent reject the traditional female role of wife-and-mother in favor of professional achievement and of more abstract service to others.

Identity Groups

Asked to indicate the degree to which they identified with each of several groups, aspiring physicians gave responses very similar to those of freshmen-in-general. Most felt their strongest identification with people of their own generation: 70 percent of the aspiring physicians and 72 percent of the total freshman class said they identified with this group "strongly" or "strongest of all" (Table II-16). The second group most often cited was "people of my own race or ethnic group": Among aspiring physicians, 39.3 percent of nonblacks but 71.7 percent of blacks endorsed this item. The third-ranked group was "people in my own community"; a strong identification was cited by nearly two-fifths of the aspiring physicians, and by more men (42 percent) than women (33.4 percent). Women were more apt to identify with "people of my own sex" (42.2 percent, as compared with 31.6 per-

Table II-16

Identity Groups, by Race and Sex—1974 Aspiring Physicians and All Freshmen

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
People who live in my community										
Strongest of all	11.7	13.5	11.8	8.0	5.3	7.6	10.6	8.9	10.4	13.6
Strongly	30.3	27.8	30.2	25.8	25.6	25.8	28.9	27.0	28.7	28.6
Moderately	43.6	46.8	43.9	50.0	48.2	49.7	45.7	47.2	45.8	44.0
Little or none	14.3	11.9	14.1	16.2	20.9	16.9	14.9	16.9	15.0	13.8
People of my own religion										
Strongest of all	8.0	6.0	7.9	7.6	7.1	7.5	7.9	6.6	7.8	6.7
Strongly	19.6	20.1	19.6	19.8	19.2	19.7	19.7	19.6	19.7	16.1
Moderately	40.9	50.5	41.4	42.1	47.5	42.9	41.3	48.9	41.9	42.7
Little or none	31.5	23.4	31.1	30.4	26.2	29.8	31.2	25.0	30.7	34.6
People of my own sex										
Strongest of all	2.8	5.7	2.9	4.0	7.2	4.4	3.2	6.5	3.4	3.5
Strongly	28.7	27.5	28.7	37.4	40.2	37.8	31.4	34.6	31.7	32.8
Moderately	60.5	61.8	60.5	52.7	44.9	51.6	58.1	52.3	57.6	56.1
Little or none	8.0	5.0	7.8	6.0	7.8	6.2	7.4	6.6	7.3	7.5
People of my own race or ethnic group										
Strongest of all	6.7	30.2	8.0	5.8	29.3	9.2	6.4	29.7	8.4	8.2
Strongly	32.9	43.5	33.5	32.7	40.8	33.9	32.9	42.0	33.6	30.4
Moderately	47.4	25.0	46.2	47.4	26.6	44.3	47.4	25.9	45.6	49.5
Little or none	13.0	1.4	12.4	14.1	3.3	12.6	13.4	2.5	12.4	11.9
People of my own generation										
Strongest of all	28.3	32.0	28.5	25.9	27.3	26.1	27.6	29.4	27.7	29.1
Strongly	41.8	44.9	42.0	42.4	45.8	42.9	42.0	45.4	42.3	42.6
Moderately	26.8	21.3	26.5	28.5	23.3	27.7	27.3	22.5	26.9	25.1
Little or none	3.0	1.7	3.0	3.2	3.6	3.2	3.1	2.7	3.1	3.1

cent of the men). The group least often mentioned was "people of my own religion"; only 27.5 percent of the aspiring physicians and 22.8 percent of freshmen-in-general cited a strong identification.

Summary

In summary, the typical student who, at college entry, expressed an interest in becoming a physician, was an 18-year-old white male whose parents were relatively affluent and well-educated, who felt little concern about his ability to finance a college education, and who expected to get substantial support from his parents. He rated himself high on a number of attributes suggesting self-confidence and achievement; gave priority to goals related to helping others, achieving in a scientific field, and winning recognition; and identified closely with people of his own generation.

Nonetheless, the characteristics of freshmen aspiring to medicine as a career changed somewhat over the eight years covered by the study, and these changes are attributable chiefly to the increase in the numbers of blacks and women in the group. Generally, nonblack men and women were alike. Blacks, however, tended to come from less affluent backgrounds and often expressed major concern over their ability to pay for a college education. They were somewhat less confident of their academic abilities than were nonblack aspiring physicians but more sure of themselves socially. They tended to endorse a greater number of life goals and, in particular, were more concerned with being very well-off financially.

College Choice

Asked to indicate their reasons for choosing a particular college, aspiring physicians as a group were less likely than were freshmen-in-general to cite low tuition (Table II-17). Nonetheless, of the aspiring physicians, one in four blacks, compared with one in five nonblacks, indicated that low tuition was a very important factor. The availability of special programs was more likely to be regarded as very important by blacks (41.8 percent) than by nonblacks (29.5 percent) and by women (38.1 percent) than by men (26.8 percent). Interestingly, the racial/ethnic difference

Table II-17

Reasons for College Choice, by Race and Sex—1976 and 1977 Aspiring Physicians

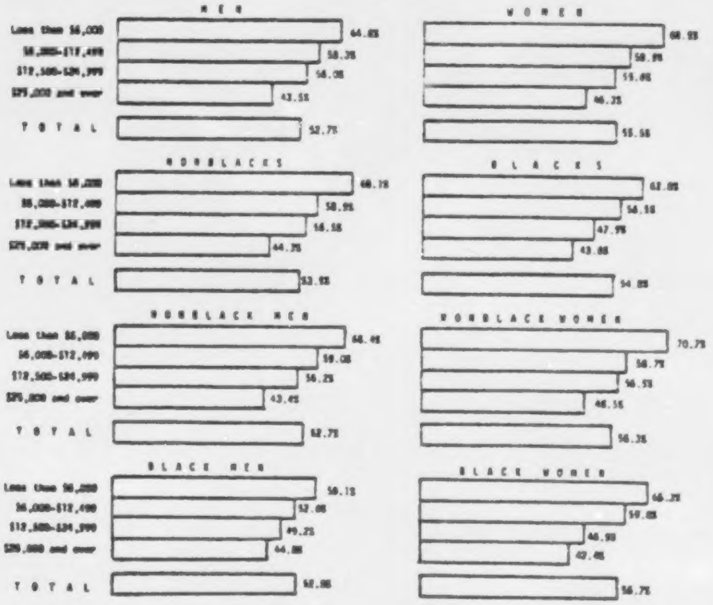
	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1976									
Low tuition:									
Very important	18.7	23.6	19.0	22.1	26.2	22.7	19.7	25.0	20.2
Somewhat important	28.7	27.0	28.6	28.6	27.3	28.4	28.7	27.2	28.5
Not important	52.6	49.4	52.4	49.3	46.5	48.9	51.6	47.8	51.3
Special programs offered:									
Very important	26.3	[illegible]	26.8	35.8	49.9	38.1	29.5	41.8	30.5
Somewhat important	35.8	38.1	35.9	33.2	22.8	33.3	35.0	35.7	35.1
Not important	37.9	25.3	37.3	30.0	28.3	28.7	35.5	22.5	34.5
Offered financial assistance:									
Very important	17.5	40.9	19.2	22.9	35.7	24.7	19.1	41.5	20.9
Somewhat important	16.0	21.4	16.3	15.7	24.8	17.0	16.9	23.3	16.5
Not important	66.5	37.7	64.5	61.4	39.5	58.3	64.0	35.2	62.5
Very good academic reputation:									
Very important	66.8	64.7	66.7	70.5	75.7	70.5	68.5	70.9	68.6
Somewhat important	26.9	31.1	27.2	25.3	20.5	25.1	25.9	25.2	25.9
Not important	6.3	4.2	6.2	4.2	3.9	4.1	5.6	4.0	5.5
1977									
Low tuition:									
Very important	14.4	15.2	14.4	17.1	13.9	16.8	15.8	14.6	15.8
Somewhat important	24.7	21.0	24.5	19.8	20.2	19.8	23.5	20.6	23.4
Not important	60.9	63.8	61.1	63.1	65.9	63.4	61.4	64.8	60.6
Special programs offered:									
Very important	24.2	33.6	24.7	32.8	[illegible]	[illegible]	26.2	31.1	26.5
Somewhat important	30.0	31.6	30.0	25.8	37.6	30.4	30.0	31.8	30.2
Not important	45.8	35.5	45.4	41.4	39.0	41.1	44.8	37.1	44.3
Offered financial assistance:									
Very important	17.9	48.8	19.3	23.4	48.0	25.7	19.2	45.1	20.9
Somewhat important	12.9	13.9	13.0	12.2	17.6	12.8	12.7	16.6	12.9
Not important	69.1	37.3	67.7	64.5	33.5	61.5	68.1	38.3	66.2
Very good academic reputation:									
Very important	64.3	70.2	64.5	71.6	[illegible]	70.9	66.0	68.2	66.1
Somewhat important	28.4	25.5	28.3	23.6	28.5	24.2	27.3	26.9	27.3
Not important	7.3	4.3	7.2	4.8	5.6	4.9	6.7	4.9	6.6

with respect to the importance of low tuition and of special programs was less marked among 1972 than among 1974 aspiring physicians. The most marked racial/ethnic difference in 1974 involved the availability of financial assistance: 41.5 percent of the blacks, but only 19.1 percent of the nonblacks, indicated that this was a very important factor in their college choice. The institution's academic reputation was a factor that counted with both blacks and nonblacks; it was mentioned by about seven in ten aspiring physicians, compared with only half of all entering freshmen.

In 1974, 77.5 percent of all entering freshmen enrolled in public institutions in contrast to just over half the aspiring physicians (Figure II-4). This is not surprising in that private

FIGURE II-4

Proportion Enrolled in Public Institutions, by Race and Sex--1974 Aspiring Physicians



colleges and universities supply most of the entrants to medical school (Dubé, 1974). Parental income was closely related to the public-private enrollment patterns of aspiring physicians, with students from lower-income backgrounds being more likely to enroll in public institutions: For instance, over two-thirds of students from families with incomes below $6,000 were enrolled in public colleges and universities, compared with just over two-fifths of those from families with incomes above $25,000.

Race and sex appeared to have little effect on public-private distribution but were related to type of institution. Of the 1974 aspiring physicians, nonblacks were more likely than were blacks to enroll in universities. Two-thirds of the blacks in the group enrolled in four-year colleges, a category that includes most of the predominantly black institutions. The proportion of black men enrolling in two-year colleges declined sharply over the eight years covered by the study, from 29.3 percent in 1966 to 14 percent in 1974 (Figure II-5). Parental income seemed to be the most important determinant of enrollment in a two-year college: In 1974, 23.3 percent of the nonblack aspiring physicians from families with incomes of less than $6,000 entered two-year colleges, compared with only 7.6 percent of those from families with incomes above $25,000 (Figures II-6 and II-7); the corresponding figures for blacks were 15.7 percent and 3.8 percent respectively. Essentially the same enrollment patterns were evident

FIGURE II-8

'Institutional Attendance Patterns for 1974, 1972, and 1966 Aspiring Physicians, by Race and Sex

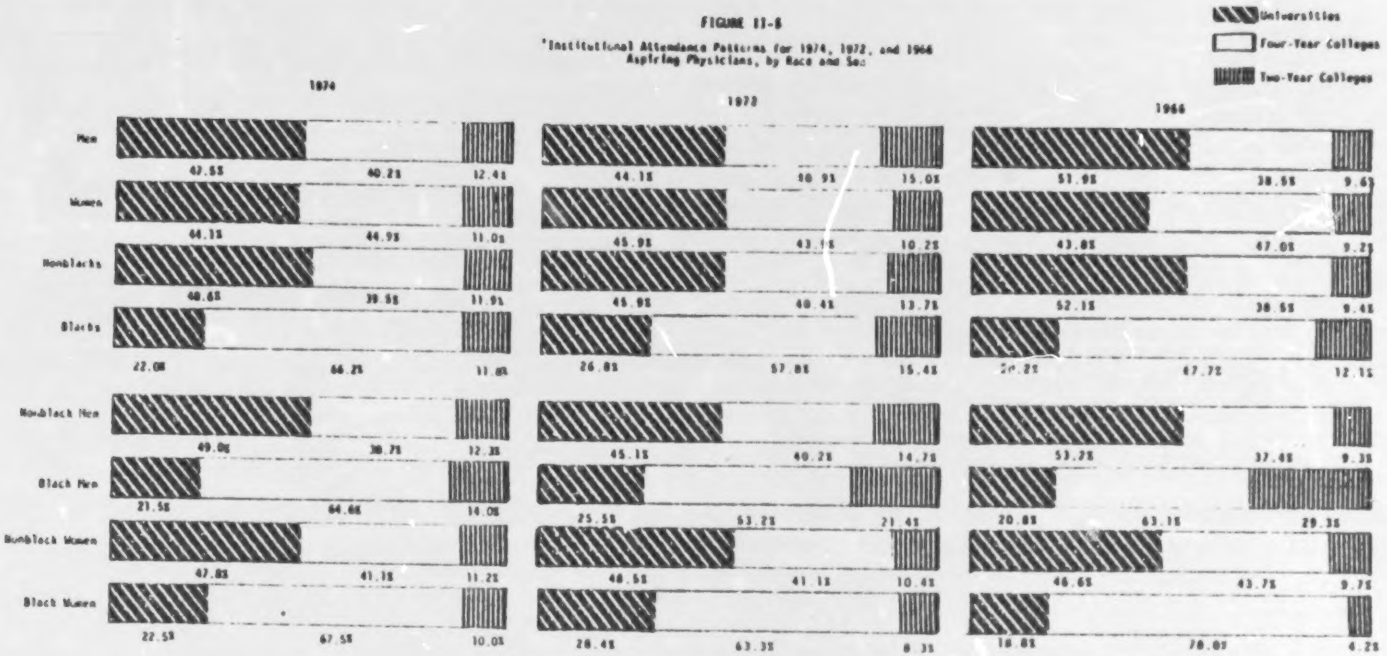


FIGURE II-6

Institutional Attendance Patterns for 1974 and 1972 Aspiring Physicians, by Sex, by Race, and by Parental Income

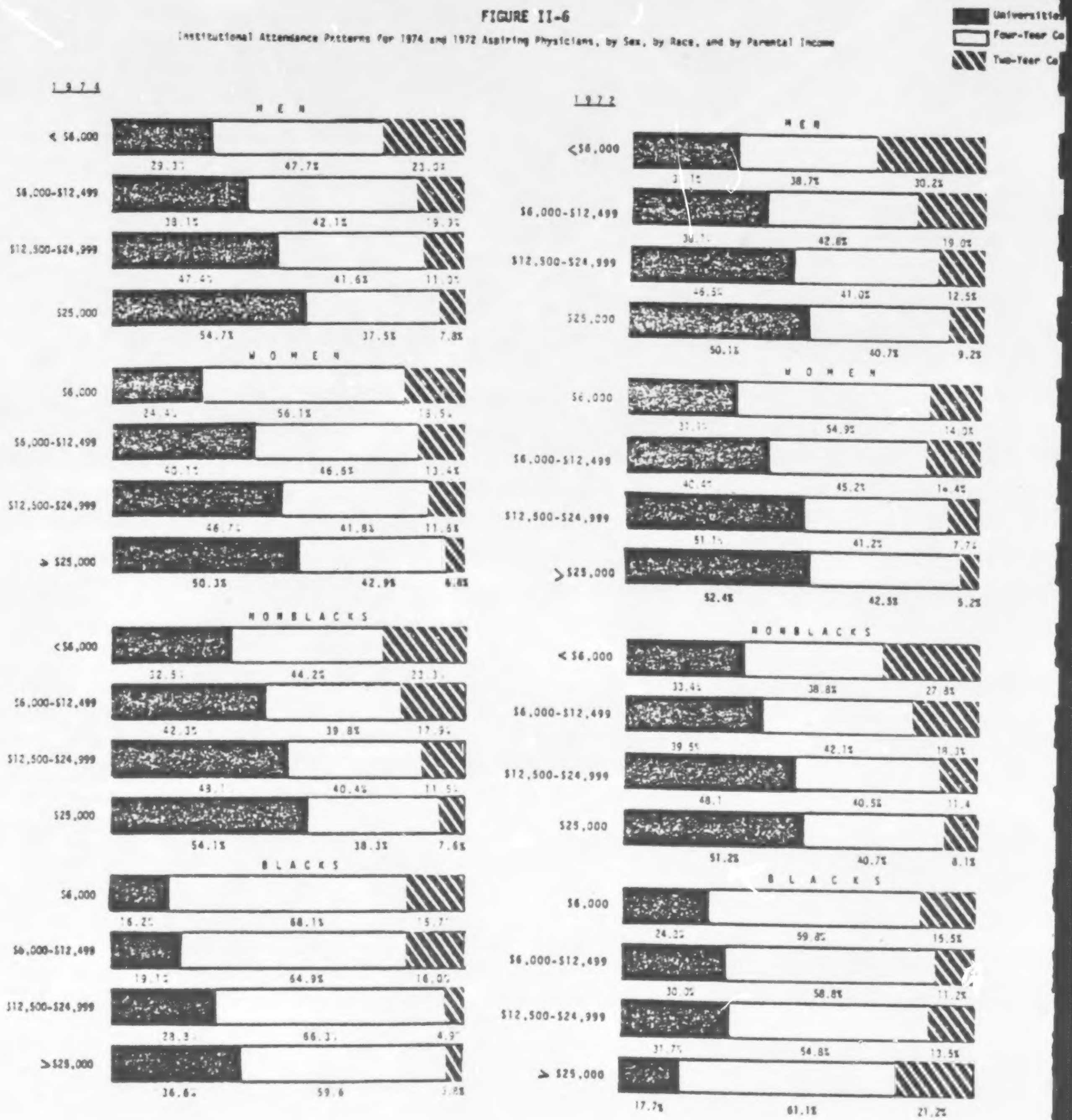
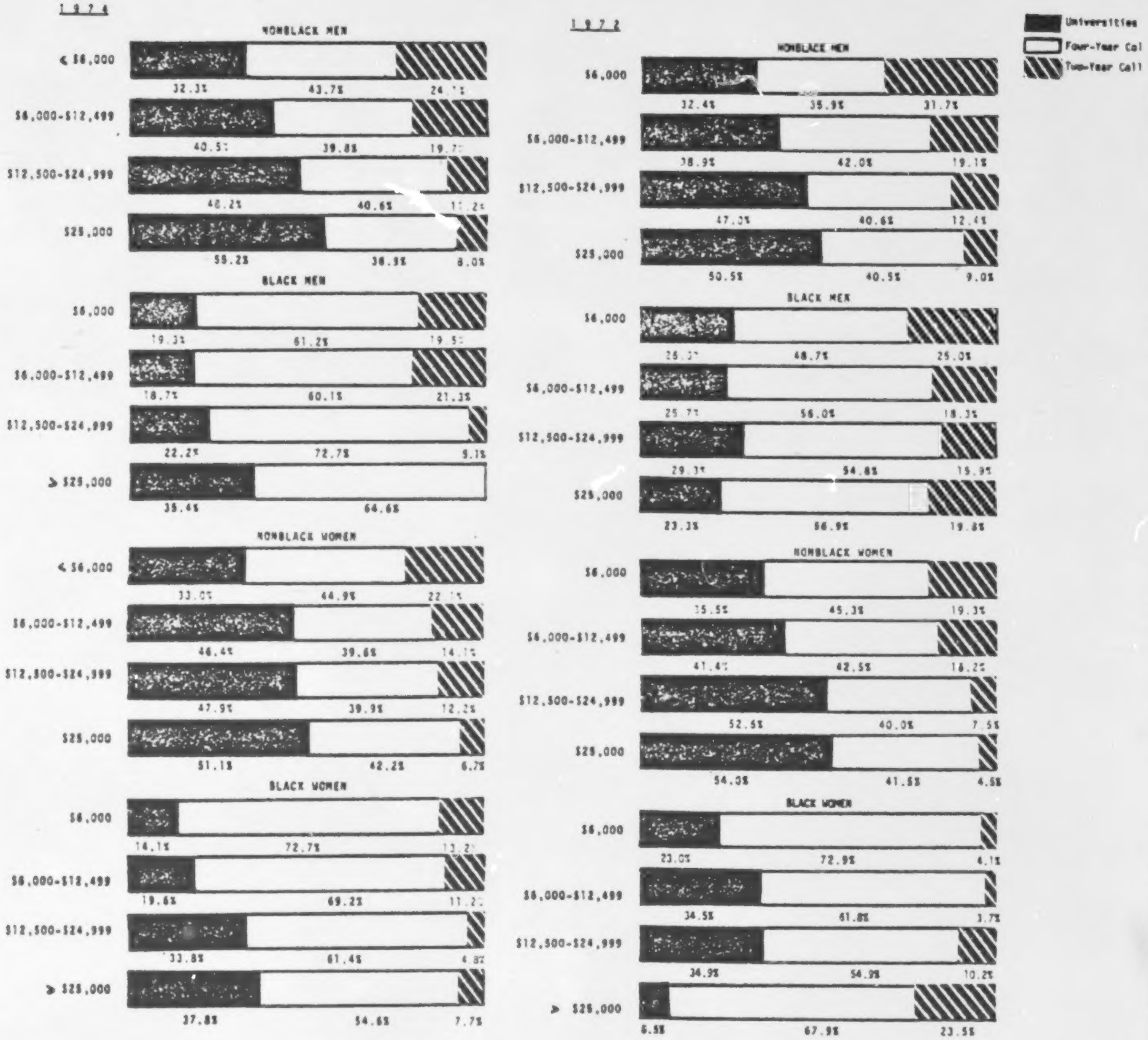


FIGURE II-7

Institutional Attendance Patterns for 1974 and 1972 Aspiring Physicians, by Race and Sex, and by Parental Income



in 1972, except for high-income blacks.[4]

Among all groups of aspiring physicians, those from high-income families ($25,000 or more) were less likely than were those from low-income families to enroll in two-year colleges. It should be pointed out here that few two-year colleges offer majors in study fields directly relevant to prospective medical students. For instance, 51 percent of aspiring physicians entering universities and 49.6 percent of those entering four-year colleges named the biological sciences as their probable undergraduate major, compared with 27.8 percent of those entering two-year colleges (Table II-18). Although they planned to become physicians, nearly two-fifths of the two-year college entrants said they would probably major in health technology. It is highly probable that many of these students will have to lower their career aspirations during the undergraduate years or will take longer to achieve their goals.

Previous research indicates that two-year college entrants are less likely than are entrants to other institutions to receive the baccalaureate within the traditional four years, chiefly because they must transfer to senior institutions and often lose credits in the process (Holmstrom and Bisconti, 1974). Of the 1974 aspiring physicians who enrolled in two-year colleges, three

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[4] The item categories used in 1966 were not the same as those used in 1972 and 1974; therefore, comparisons by income categories were carried out only for 1972 and 1974.

Table II-18

Probable Study Field Major, by Race and Sex and by Institutional Type--1974 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University:									
Biological sciences	49.3	46.3	49.3	55.0	49.9	54.7	51.1	48.4	51.0
Health technology	19.0	22.3	19.1	12.5	14.7	12.6	17.0	18.0	17.1
Nursing	.1	.0	.1	.6	1.2	.6	.2	.7	.2
Pharmacy	.2	.5	.3	.3	.0	.3	.3	.2	.3
Therapy	.4	.0	.4	.5	.5	.5	.4	.3	.4
Other health fields	9.3	10.9	9.4	12.7	17.7	13.0	10.4	14.8	10.5
Total health fields	78.3	80.0	78.6	81.6	84.0	81.7	79.4	82.4	79.5
Total nonhealth fields	21.7	20.0	21.4	18.4	16.0	18.3	20.6	17.6	20.5
Four-Year College:									
Biological sciences	51.4	49.2	51.2	47.8	42.5	46.7	50.2	45.3	49.6
Health technology	20.5	24.3	20.8	18.1	18.6	18.2	19.7	21.0	19.9
Nursing	.1	.0	.1	2.0	.7	1.7	.7	.4	.6
Pharmacy	.7	1.1	.8	.5	.0	.4	.7	.5	.6
Therapy	.7	.0	.7	.5	1.1	.6	.6	.7	.6
Other health fields	10.5	11.9	10.6	18.5	25.9	20.1	13.1	20.0	14.0
Total health fields	83.9	86.5	84.2	87.4	88.8	87.7	85.0	87.9	85.3
Total nonhealth fields	16.1	13.5	15.8	12.6	11.2	12.3	15.0	12.1	14.7
Two-Year College:									
Biological Sciences	25.5	27.9	25.6	32.5	34.8	32.8	27.5	31.8	27.8
Health technology	46.7	13.8	45.3	17.0	33.4	19.0	38.1	25.0	37.3
Nursing	.0	.0	.0	11.1	.0	9.7	3.2	.0	3.0
Pharmacy	2.2	.0	2.1	.4	.0	.4	1.7	.0	1.6
Therapy	1.[illegible]	.0	1.4	4.0	.0	3.6	2.2	.0	2.1
Other health fields	16.0	13.5	15.9	17.4	23.2	18.1	16.4	19.0	16.6
Total health fields	91.9	55.2	90.3	86.0	80.2	83.6	89.1	75.8	88.4
Total nonhealth fields	8.1	44.8	9.7	14.0	19.8	16.4	10.9	24.2	11.6

in five planned to transfer to another college before graduating (Table II-19). Not surprisingly, their degree aspirations were somewhat lower than were those of other students: Only 74.3 percent of the aspiring physicians in two-year colleges, but 84 percent of those in four-year colleges and 87.9 percent of those

Table II-19

Proportion Likely to Transfer to Another College,[a] by Race and Sex and by Institutional Type--1974 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University	32.0	28.6	31.9	36.4	28.1	35.8	33.3	28.3	33.1
Four-year college	42.0	41.2	41.9	49.7	35.2	46.6	44.5	37.7	43.6
Two-year college	60.6	78.7	61.7	54.5	66.2	56.0	58.8	72.5	59.9

[a] Proportion indicating that there was "some chance" or "a very good chance" that they would transfer to another college before graduating.

in universities, planned to get a medical degree (Table II-20). About one in ten aspiring physicians aimed for a Ph.D. It is clear, however, that many students who hope to become physicians are aware that financial or academic difficulties may hamper them in undertaking such long and expensive training--a finding reported by other researchers in this area.

Table II-20

Degree Plans, by Race and Sex, and by Type of Institution--1974 Aspiring Physicians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Universities									
Bachelor's	2.1	1.7	2.1	1.6	2.3	1.6	2.0	2.1	2.0
Master's	1.9	--	1.8	.8	1.2	.9	1.6	.7	1.5
Ph.D. or Ed.D.	8.4	7.4	8.4	5.6	9.2	5.8	7.5	8.4	7.6
Medical degree	86.6	88.1	86.7	91.0	86.2	90.6	88.0	87.0	87.9
Other	1.0	2.8	1.0	1.0	1.1	1.1	.9	1.8	1.0
Four-Year Colleges									
Bachelor's	2.9	5.3	3.1	1.8	3.8	2.2	2.5	4.5	2.8
Master's	2.4	3.2	2.4	2.1	1.9	2.1	2.3	2.4	2.3
Ph.D. or Ed.D.	9.8	15.1	10.2	7.6	13.5	8.8	9.1	14.2	9.8
Medical degree	83.6	74.2	82.8	87.7	80.0	86.1	84.9	77.5	84.0
Other	1.3	2.2	1.5	.8	.8	.8	1.2	1.4	1.1
Two-Year Colleges									
Bachelor's	3.9	8.7	4.2	5.2	--	4.6	4.2	4.9	4.3
Master's	5.6	20.8	6.6	2.1	--	1.9	4.6	11.8	5.2
Ph.D. or Ed.D.	10.7	23.1	11.5	14.5	18.6	15.0	11.8	21.2	12.6
Medical degree	75.0	47.4	73.2	77.5	73.0	77.0	75.7	58.5	74.3
Other	4.8	.0	4.5	.7	8.4	1.5	3.7	3.6	3.6

Career Choice

In giving the "very important" reasons for their choice of a career, aspiring physicians were less likely than were freshmen-in-general to cite economic and instrumental considerations (the availability of job openings, the chance for rapid advancement, high earnings) and more likely to mention altruistic concerns (Table II-21). Thus, the great majority of aspiring physicians cited the opportunity to be helpful to others (86.6 percent versus 61.8 percent of all freshmen), the opportunity to contribute to society (79.3 percent versus 47.2 percent), and the ability to work with people (77.5 percent versus 61.3 percent) as very influential in their choice of a career. Each of these reasons was somewhat more important to women and blacks than to men and nonblacks.

Table II-21

Reasons[a] for Career Choice, by Race and Sex--1974 Aspiring Physicians

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Job openings generally available	38.2	58.4	39.3	39.6	58.3	42.2	38.6	58.4	40.3	46.8
Rapid career advancement possible	27.1	39.4	27.7	22.0	40.4	24.6	25.5	40.0	26.7	34.8
High anticipated earnings	38.8	53.4	39.4	21.6	40.2	24.3	33.5	44.6	34.4	41.7
Well-respected or prestigious occupation	42.7	48.9	43.1	32.0	46.1	33.8	39.4	47.2	40.0	32.2
Great deal of independence	52.5	48.3	52.3	49.0	53.9	49.7	51.4	51.5	51.4	41.1
Chance for steady progress	42.3	61.3	43.3	46.3	63.2	48.7	43.5	62.4	45.0	48.7
Can make an important contribution to society	76.3	79.7	76.4	84.6	87.5	85.0	78.6	84.2	79.3	47.2
Can avoid pressure	9.7	12.9	9.8	8.3	13.0	8.9	9.2	12.9	9.5	17.0
Can work with ideas	36.4	45.8	36.9	42.5	51.0	43.7	38.3	48.8	39.1	44.1
Can be helpful to others	83.8	88.3	84.0	91.1	95.0	91.6	86.0	92.1	86.6	61.8
Able to work with people	73.6	81.1	74.0	83.3	92.7	84.7	76.6	87.7	77.5	61.3
Intrinsic interest in the field	76.3	70.2	76.0	88.1	83.0	88.0	79.0	77.4	78.9	67.4

[a] Reason indicated as "very important."

Intrinsic interest in the field was an important factor to four out of five aspiring physicians, compared with two-thirds of freshmen-in-general. Half agreed that the independence offered by a career in medicine was a very important factor, 45 percent mentioned the chance for steady progress, and two-fifths cited job availability and the prestige of the profession.

Black aspiring physicians were somewhat closer to freshmen-in-general in that they were more likely to cite economic and instrumental considerations. For instance, 62.4 percent of the blacks but 43.5 percent of the nonblacks agreed that the chance for steady progress was a very important factor; 58.4 percent of the blacks but 38.6 percent of the nonblacks specified job availability; 44.6 percent of the blacks but only 33.5 percent of the nonblacks said that high anticipated earnings influenced their career decisions. High expected earnings also differentiated between the sexes: Only 24.3 percent of the women but 39.4 percent of the men endorsed this as a very important factor. Women and blacks were also more likely than were men or nonblacks to say that the opportunity to work with ideas was very important to them. The least important factor, mentioned by only one in ten aspiring physicians and 17 percent of freshmen-in-general, was avoiding pressure.

Among aspiring physicians, parental income made little difference to the reasons cited as important in career choice, particularly with respect to the altruistic reasons cited by the majority (Table II-22). On the other hand, factors relating to salary and job security were more often regarded as very important by lower-income students. For instance, 43.9 percent of the men from fami-

Table II-22

Reasons[a] for Career Choice, by Race, by Sex, and by Income Level--1979 Aspiring Physicians

	Men	Women	Nonblacks	Blacks
Job openings generally available:				
Less than $6,000	43.8	47.8	38.8	66.6
$6,000 - $12,499	41.1	46.2	40.1	56.8
$12,500 - $24,999	41.3	39.6	43.1	58.9
$25,000 and over	34.6	42.1	36.1	56.3
Rapid career advancement possible:				
Less than $6,000	33.9	31.8	29.8	40.2
$6,000 - $12,499	29.7	28.3	26.3	41.6
$12,500 - $24,999	27.2	21.9	24.9	38.3
$25,000 and over	26.5	21.4	24.9	28.6
High anticipated earnings:				
Less than $6,000	40.5	32.1	30.2	51.7
$6,000 - $12,499	37.1	22.3	30.6	39.6
$12,500 - $24,999	36.1	21.0	33.1	40.2
$25,000 and over	41.6	25.7	35.9	44.5
Well-respected or prestigious occupation:				
Less than $6,000	42.1	46.6	43.2	46.5
$6,000 - $12,499	42.1	34.9	38.5	46.0
$12,500 - $24,999	43.2	29.5	38.4	45.2
$25,000 and over	44.2	34.7	41.2	49.0
Great deal of independence:				
Less than $6,000	46.7	48.6	50.8	63.9
$6,000 - $12,499	46.7	40.8	46.7	50.1
$12,500 - $24,999	49.6	46.1	48.4	51.7
$25,000 and over	59.8	56.1	50.4	49.1
Chance for steady progress:				
Less than $6,000	40.1	56.1	48.2	56.9
$6,000 - $12,499	42.3	49.1	42.1	50.1
$12,500 - $24,999	40.4	46.3	41.0	67.5
$25,000 and over	45.7	49.6	46.1	48.2
Can make an important contribution to society:				
Less than $6,000	74.9	86.9	81.1	82.0
$6,000 - $12,499	78.4	86.2	80.2	84.2
$12,500 - $24,999	73.9	89.2	78.6	82.7
$25,000 and over	75.9	83.9	77.9	88.6
Can avoid pressure:				
Less than $6,000	10.9	14.6	13.4	10.6
$6,000 - $12,499	10.1	9.5	9.2	13.6
$12,500 - $24,999	9.7	7.0	8.8	11.2
$25,000 and over	9.7	8.4	9.0	10.9
Can work with ideas:				
Less than $6,000	34.3	53.7	38.6	52.4
$6,000 - $12,499	38.7	43.2	37.2	64.8
$12,500 - $24,999	34.6	41.0	35.5	48.2
$25,000 and over	39.9	40.1	40.7	51.7
Can be helpful to others:				
Less than $6,000	86.4	90.2	89.6	87.9
$6,000 - $12,499	86.2	92.2	86.5	90.9
$12,500 - $24,999	83.2	91.2	85.3	92.9
$25,000 and over	83.7	90.9	85.5	90.9
Able to work with people:				
Less than $6,000	73.6	90.2	81.1	80.0
$6,000 - $12,499	77.2	86.0	78.6	89.5
$12,500 - $24,999	71.9	82.5	74.8	83.6
$25,000 and over	73.9	84.5	78.4	93.0
Intrinsic interest in the field:				
Less than $6,000	74.9	80.8	76.6	80.1
$6,000 - $12,499	73.5	80.1	78.2	73.7
$12,500 - $24,999	75.0	86.2	76.8	81.0
$25,000 and over	77.7	80.3	79.7	75.3

[a] Reason indicated as "very important."

lies with incomes below $6,000 regarded job availability as a very important factor, in contrast to 34.6 percent of those from families with incomes above $25,000.

Summary

In summary, the characteristics of freshmen interested in medicine as a lifelong career have changed relatively little since 1966; in 1974, the modal aspiring physician was still a young white male from a relatively affluent and well-educated family, who was self-assured about his intellectual abilities, and whose interest in becoming a physician reflected altruistic values. Since 1966, however, the numbers of women and of blacks planning a career in medicine have increased significantly; and since blacks tend to come from less affluent families (their median parental income being only about half that of nonblacks), the socioeconomic composition of the total group of aspiring physicians has changed slightly, as has the importance attached to the economic and instrumental rewards of the profession.

For a long time, entering medical school classes were a homogeneous group. Recent statistics, however, show that the group is becoming slightly more heterogeneous: For instance, the participation of women in first-year medical school classes was greater in 1974-75 than ever before, with 22 percent of all medical school entrants being women. Similarly, 13 percent of the 1974-75 entering medical school class identified themselves as minority-group members, an increase in absolute numbers of 45.7 percent since the

1970-71 academic year. The largest percentage increase occurred among American Indians, though the absolute numbers were small: from 11 medical school entrants in 1970 to 71 in 1974, for a 545 percent increase. The smallest increase over the period occurred among blacks (37 percent) and Orientals (45 percent)[5] (Dubé, 1975).

These changes in the sex and racial/ethnic composition of their entering classes make it imperative that medical schools make some changes in their treatment and expectations. Educators have already pointed out, for instance, that the traditional criteria used to predict success in medical school (e.g., scores on the Medical College Admission Test, college grade-point average) may have little value in predicting the success of underrepresented minorities (see Evans et al., 1975). Other observers are concerned over individual and institutional barriers that may discriminate against women and minorities in medical school and thus cause them to drop out (Johnson and Sedlacek, 1975). Clearly, the expectations and attitudes of medical school faculty may make a crucial difference to their persistence and achievement. In this connection, it should be borne in mind that blacks and women among the group of entering freshmen who plan to become physicians are unusually confident of their own intellectual abilities and are much more likely than is the average freshman to rate themselves high on such qualities as drive to achieve, leadership, and originality; to be confronted in medical school by negative attitudes on the part of the faculty might well be a shattering experience for them.

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[5] It should be pointed out that Orientals are not underrepresented among medical school entrants.

The increase in the number of these new types of students--minorities and women--compensate somewhat for the slight decline in the absolute numbers of nonblack men who at college entry name medicine as their career choice. In an attempt to elucidate the reasons for this decline, we took a closer look at the characteristics of nonblack male aspiring physicians in each of the three freshman classes under study. As Table II-23 indicates, however, no significant differences were detected. The same trends were also apparent among nonblack men in the total freshman class: e.g., increase in father's educational level and in two-year col-

Table II-23

A Comparison of the Characteristics of Nonblack Male Aspiring Physicians in Three Freshman Classes

Characteristic	1974	1972	1966
19 years or older	15.9	15.3	14.8
Father's education: college graduate or higher	49.8	47.5	44.2
Mother's education: college graduate or higher	30.2	30.0	27.0
Father's occupation: physician	10.1	9.7	---
Major concern over financing college education	13.2	13.7	5.6
Financial support from parents, family	86.4	88.7	93.3
Enrolled in universities	49.0	45.1	53.2
Enrolled in four-year colleges	38.8	40.2	37.4
Enrolled in two-year colleges	12.3	14.7	9.3
Median parental income[a]	$12,903	$12,775	$12,492

[a] Reported in 1966 constant dollars.

lege enrollments. In addition, among aspiring physicians, the proportion expecting parental support decreased slightly, but basically the nonblack man's declining interest in medicine as a career cannot be explained by any data available from this study. In 1974-75, however, medical school enrollments again reached record heights, suggesting that the decline in interest among white male entering freshmen is more than compensated for by recruitments into the field during the four years of college (Dubé, 1975).

CHAPTER III - ASPIRING DENTISTS

HIGHLIGHTS

- In the fall of 1974, 21,073 first-time, full-time freshmen (1.3 percent of the total entering class) named dentistry as their career choice. This represents an increase of 13.7 percent over 1966 in the number of aspiring dentists; the increase was greatest among women (243.1 percent) and blacks (74.6 percent), while the number of nonblack men registered a slight decrease (10.8 percent). Though dentistry as a career choice became more popular among women and blacks over the eight-year period, it was still predominantly male (71.2 percent) and nonblack (95.5 percent).

- The typical aspiring dentist, in 1974 as in 1966, was an 18-year-old white man from a fairly high socioeconomic background, though slightly less so (particularly in terms of mother's education) than his counterpart planning a career in medicine. He saw himself as physically attractive and mechanically and athletically superior, and he was also more likely than was the average male freshman or other nonblack male aspiring health professionals (except physicians) to rate himself high on drive to achieve, originality; academic, mathematical, public speaking, and leadership ability; and intellectual self-confidence. His life goals reflected rather conventional values and notions of success (raising a family, succeeding in his own business), as well as altruism (helping others in difficulty). More than other nonblack men planning careers in the health professions, and in marked contrast to aspiring physicians, his reasons for choosing a career were practical and materialistic: rapid advancement, high earnings, prestige, steady progress. He was more likely than was the average freshman to enroll in a four-year college or university, where the likelihood of his majoring in a field congruent with his career plans (e.g., predentistry) was higher. His degree aspirations were congruent with his career plans. He expressed little concern over his financial situation, expected substantial support from his parents, and thus seems to stand a good chance of realizing his freshman goals.

- The increase in the number of blacks planning to become dentists was attributable almost entirely to a dramatic jump in the number of black women (924.4 percent), who nonetheless remained a tiny minority (2.2 percent) of 1974 aspiring dentists. The number of black men declined slightly over the eight-year period.

Black men among aspiring dentists were distinguished by their extreme self-assurance and confidence in both their intellectual capabilities and their social skills. They were particularly likely to rate themselves high on drive to achieve, originality, physical attractiveness, popularity, popularity with the opposite sex, understanding of others, artistic ability, and athletic ability. Moreover, they gave high priority to a large number of life goals, reflecting a desire to achieve in their field, to win recognition, to be materially successful, and to be socially and politically effective.

Black women differed from black men in that they were more likely to be married and to have college-educated parents; they were less sure of their intellectual abilities, and they gave less emphasis to occupational achievement goals, though they were more concerned than were other female aspiring health professionals with being very well-off financially, succeeding in their own business, and having administrative responsibility over others.

Black aspiring dentists of both sexes were more likely than were nonblacks to be age 19 or over at college entry, to come from low socioeconomic backgrounds, to be financially independent of their parents, and to express major concern over their ability to pay for college. Except for the one-fourth who enrolled in two-year colleges, their degree and study field plans seemed consistent with their career plans, suggesting that many of them will succeed in reaching their freshman goals.

- Nonblack women who said they planned to become dentists present a special problem in that over half enrolled in two-year colleges, over half said they planned to major in health technology, and relatively few aspired to a medical degree--all of which suggests that many of these women will actually become dental hygienists or health technologists rather than dentists. Though they shared with their male counterparts a concern with the financial and status rewards connected with their profession and a considerable confidence in their social skills, they were markedly less confident of their intellectual abilities. Moreover, they were less likely than were black women planning to become dentists to value achievement and success goals or to choose their career for either altruistic and people-oriented reasons or for materialistic and practical reasons.

General Characteristics

In the fall of 1974, at the time of college entry, 21,073 first-time, full-time freshmen (i.e., 1.3 percent of the total entering class) named dentistry as their probable future occupation. This group (for convenience referred to as aspiring dentists) is described here and, where appropriate, compared with corresponding groups from the 1966 and 1972 freshman classes. In addition, comparisons are occasionally made between aspiring dentists and all entering 1974 freshmen as reported in the national norms (Astin et al., 1974) as well as between aspiring dentists and students interested in other health professions such as medicine. Table III-1 shows the number of aspiring dentists, by sex and race/ethnicity (nonblack and black), in all three freshman classes.

Table III-1

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Dentists, by Race and Sex

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	14,510	494	15,004	5,609	461	6,070	20,118	955	21,073
1972	14,546	791	15,337	2,528	220*	2,747	17,073	1,011	18,084
1966	16,262	502	16,764	1,724	45*	1,769	17,986	547	18,533

*Actual numbers were too small for further analyses.

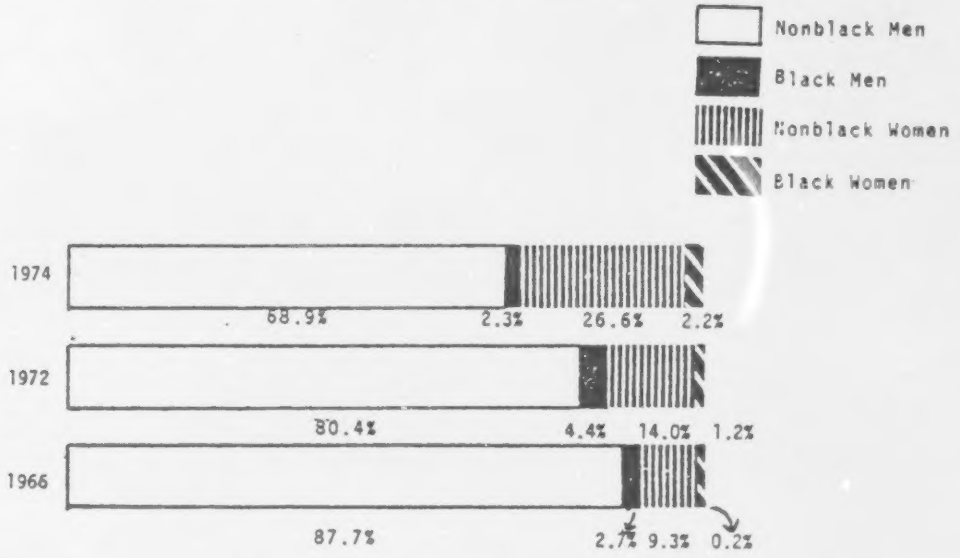
The following sections profile aspiring dentists in terms of their demographic and background characteristics, college finances, self-ratings, life goals, and identity groups.

Sex and Race/Ethnicity

Since 1966, dentistry has become an increasingly popular career choice with women and blacks: In 1966, 90.4 percent of the aspiring dentists were men, but during the eight-year period studied here, the number of men choosing dentistry as a career declined by 10.5 percent while the number of women increased by 243.1 percent, altering the sex ratio somewhat. In 1974, however, the group of aspiring dentists was still predominantly male (71.2 percent, in contrast to 52.2 percent of the total freshman class) and nonblack (95.5 percent, compared with 92.6 percent of the total freshman class (Figure III-1).

FIGURE III-1

Race and Sex Distribution of 1966, 1972, and 1974 Freshmen Aspiring to Become Dentists



The number of black men interested in dentistry increased by 57.6 percent between 1966 and 1972, then dropped by 37.5 percent between 1972 and 1974, resulting in a slight decline over the entire eight-year period in the number of black men planning on a career in dentistry. In contrast, the number of black women grew rapidly and steadily, registering a dramatic increase of 924.4 percent over the eight-year period. Nonetheless, in 1974, black women constituted only 2.2 percent of the total group of students aspiring to become dentists.

In each of the freshman classes studied here, a very small proportion of the nonblack students among aspiring dentists identified themselves as belonging to a racial/ethnic minority. Because their numbers are too small for reliable comparisons, these students are not discussed separately. Table III-2 shows the number and distribution of these nonblack minority students.

Table III-2

Number and Distribution of Nonblack Minority Group Members
Aspiring to Become Dentists--1974, 1972, and 1966 Freshman Classes

	1974		1972		1966	
	N	%	N	%	N	%
American Indian	89	5.6	186	11.1	72	9.3
Oriental	417	26.3	468	28.0	180	23.3
Mexican-American	485	30.5	602	36.0	---	---
Puerto Rican	30	1.9	35	2.1	---	---
Other	567	35.7	382	22.8	520	67.4
Total	1,588	100.0	1,673	100.0	772	100.0

In 1974, Spanish-speaking minorities constituted nearly one-third of these nonblack minority students, followed by Orientals (26.3 percent), and American Indians (5.6 percent); the "other" category, however, claimed the largest proportion (35.7 percent). In 1966, the categories Mexican-American and Puerto Rican were not included in the race/ethnicity items; thus, comparisons with the 1966 freshman class cannot be made except that the number of nonblack minority students interested in dentistry registered a growth rate of 105.7 percent during the eight-year period after reaching a peak in 1972.

Age and Marital/Dating Status

Like most freshmen aspiring to a career in the health professions, the typical aspiring dentist entered college at age 18, directly after high school graduation (Tables III-3 and III-4). Among aspiring physicians, black men tended to be slightly older than nonblack men, while the reverse was true among women. Among aspiring dentists, both black men and women were slightly older than nonblacks (25.3 percent of blacks but 18.5 percent of nonblacks were 19 or older). Further, among aspiring dentists, women--particularly black women--were somewhat more likely to delay college entry than were men, while the opposite was true for black women aspiring to become physicians.

Table III-3

Age Distribution, by Race and Sex--1974 Aspiring Dentists

Age, as of 31 December, 1974	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
16 or younger	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	2.5	2.2	2.5	5.0	5.1	5.0	3.2	3.6	3.2
18	78.3	72.8	78.2	78.4	69.3	77.7	78.3	71.1	78.0
19	17.3	15.1	17.3	14.2	14.8	14.3	16.5	15.0	16.4
20	1.0	2.4	1.0	1.8	10.9	2.5	1.2	5.5	1.4
21 or older	.9	7.4	1.1	.7	.0	.6	.8	3.3	1.0

Table III-4

High School Graduation Year/Status, by Race and Sex--1974 Aspiring Dentists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Graduated 1974	97.2	96.6	97.2	93.6	91.9	93.5	96.2	94.3	96.1
Graduated 1973	1.7	.6	1.7	4.0	8.1	4.3	2.3	4.3	2.4
Graduated 1972	.2	.5	.2	1.1	.0	1.0	.4	.2	.4
Graduated 1971 or earlier	.3	.0	.3	.1	.0	.1	.2	.0	.2
Passed G.E.D. test	.6	2.3	.6	.8	.0	.7	.6	1.2	.6
Never completed high school	.0	.0	.0	.5	.0	.4	.2	.0	.1

Consistent with their being slightly older, black women among aspiring dentists were more likely to be married (5.5 percent versus fewer than 1 percent of the other subgroups) (Table III-5). Nearly two in five of the total group of aspiring dentists were engaged or going steady, another two in five said they were dating several people, while 16.3 percent reported that they had not dated in recent months. There were no discernible differences between the 1974, 1972, and 1966 aspiring dentists with respect to age and marital/dating status at college entry.

Table III-5

Marital/Dating Status, by Race and Sex--1974 Aspiring Dentists

Marital/Dating Status	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Presently married	.9	.0	.9	.9	5.5	1.3	.9	2.8	1.0
Presently engaged	1.1	1.3	1.1	5.4	2.9	5.2	2.3	2.1	2.3
Have been seeing one person exclusively	36.1	31.7	36.0	42.1	30.2	41.2	37.8	30.9	37.5
Have been seeing several persons, but no one exclusively	45.0	58.9	45.4	36.8	37.5	36.9	42.7	48.1	43.0
Have not been dating in recent months	16.9	8.1	16.6	14.8	23.9	15.5	16.3	16.1	16.3

Socioeconomic Background

Like aspiring physicians, aspiring dentists came from fairly affluent backgrounds. In 1974, they reported a median parental income of $17,300, a figure that was $2,912 more than the median parental income for the entire freshman class, and only $449 less than the median parental income reported by aspiring physicians (Table III-6).

Table III-6

Parental Income (1973), by Race and Sex--1974 Aspiring Dentists

Parental Income (1973)	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Less than $3,000	1.1	16.7	1.6	3.6	7.5	4.0	1.8	12.1	2.2
$3,000 - $3,999	.4	5.7	.6	2.2	13.3	3.2	.9	9.5	1.3
$4,000 - $5,999	1.8	6.1	1.9	3.8	8.3	4.2	2.3	7.2	2.5
$6,000 - $7,999	3.4	14.1	3.8	7.0	10.9	7.3	4.3	12.5	4.7
$8,000 - $9,999	4.7	14.7	5.0	4.0	8.5	4.4	4.5	11.6	4.9
$10,000 - $12,499	11.9	8.8	11.8	16.5	13.1	16.2	13.1	11.0	13.0
$12,500 - $14,999	12.9	6.1	12.6	13.3	7.3	12.7	13.0	6.7	12.7
$15,000 - $19,999	20.8	9.9	20.5	15.2	10.6	14.8	19.4	10.3	19.0
$20,000 - $24,999	17.4	7.6	17.1	12.1	10.6	12.0	16.0	9.1	15.7
$25,000 - $29,999	8.6	4.0	8.4	7.2	5.7	7.0	8.2	4.8	8.0
$30,000 - $34,999	4.8	4.2	4.8	5.5	1.3	5.1	5.0	2.8	4.9
$35,000 - $39,999	3.5	.5	3.4	1.8	1.0	1.7	3.1	.7	2.9
$40,000 - $49,999	3.3	.8	3.3	2.6	.0	2.4	3.1	.4	3.0
$50,000 or more	5.4	1.0	5.2	5.4	1.9	5.1	5.4	1.5	5.2
MEDIAN	$18,295	$9,031	$18,075	$14,944	$10,263	$14,624	$17,599	$9,519	$17,300

As was the case with aspiring physicians, blacks who planned to become dentists came from significantly less affluent backgrounds, reporting a median parental income of only $9,519. Nonblack women reported parental incomes which, on the average, were $3,351 less than the median for nonblack men. In contrast, the average parental income of black women was $1,232 higher that that of black men.

When the median parental incomes of 1966, 1972, and 1974 aspiring dentists are converted into 1966 constant dollars as deflated by the Consumer Price Index, one finds very little change in the financial background of nonblack students but a decrease in the parental income for blacks (Table III-7). The median parental income of nonblack students was $313 more in 1974 than it was in 1966, while the median parental income of blacks was $2,000 less. A similar trend was observed among blacks aspiring to become physicians, suggesting that blacks from lower socioeconomic backgrounds are becoming increasingly interested in medicine and dentistry as career options, perhaps as a result of increased efforts in these fields to recruit minority students.

Table III-7

Median Parental Income in Constant Dollars,[a] by Race and Sex--1974, 1972, and 1966 Aspiring Dentists

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	$12,497	$6,169	$12,346	$10,203	$7,010	$9,989	$12,021	$6,509	$11,817
1972	$12,092	$7,214	$11,851	$10,320	b/	$9,701	$11,777	$6,371	$11,531
1966	$11,760	$8,136	$11,643	$11,176	b/	$11,145	$11,708	$8,509	$11,627

[a] Median parental income figures are in fiscal 1966 constant dollars as deflated by the Consumer Price Index.

[b] Actual numbers were too small for further analyses.

The parents of aspiring dentists were slightly better educated than were the parents of freshmen-in-general but less so than were parents of aspiring physicians (Tables III-8 and III-9): 38.9 percent of aspiring dentists but 47.8 percent of aspiring physicians and only 31.5 percent of all freshmen reported that their fathers had at least graduated from college; 17.1 percent of the aspiring dentists, 24.4 percent of the aspiring physicians, and only 12 percent of all freshmen said that their fathers had graduate degrees.

Table III-8

Father's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Dentists

Father's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	3.5	6.2	3.6	6.6	12.2	7.1	4.4	9.2	4.6
Some high school	7.6	16.8	7.8	11.3	22.3	12.1	8.6	19.0	9.0
High school graduate	25.1	36.4	25.4	29.8	22.3	29.2	26.4	29.5	26.5
Postsecondary school other than college	4.4	9.0	4.6	3.6	8.2	3.8	4.2	7.6	4.4
Some college	16.5	15.9	16.5	18.1	6.9	17.3	17.0	11.5	16.7
College degree	21.2	4.6	20.7	16.8	17.0	16.9	19.8	10.8	19.4
Some graduate school	2.6	1.3	2.6	2.1	.8	2.0	2.5	1.0	2.4
Graduate degree	19.0	10.7	18.8	12.0	12.3	12.7	17.3	11.5	17.1
1972:									
Grammar school or less	4.3	8.5	4.5	10.9	—	10.6	5.3	8.1	5.4
Some high school	11.1	30.3	12.0	11.2	—	13.0	11.1	31.3	12.2
High school graduate	26.3	27.6	26.4	28.5	—	27.9	26.3	31.6	26.6
Some college	17.2	13.8	17.1	18.3	—	17.3	17.4	11.9	17.1
College degree	21.5	9.4	20.9	16.2	—	16.1	20.7	7.5	20.1
Some graduate school	2.5	3.1	2.6	2.9	—	2.8	2.6	2.9	2.6
Graduate degree	17.0	7.3	16.5	14.0	—	13.3	16.5	6.7	16.1
1966:									
Grammar school or less	4.7	6.6	4.8	2.3	—	2.2	4.5	6.0	4.5
Some high school	10.9	27.9	11.4	16.6	—	16.3	11.4	27.6	11.9
High school graduate	28.2	30.0	26.4	27.8	—	27.8	28.3	33.6	28.5
Some college	23.8	11.8	23.6	29.1	—	28.4	24.3	10.9	23.9
College degree	21.2	6.0	20.6	16.2	—	14.6	20.7	5.5	20.2
Postgraduate degree	13.1	13.7	13.2	9.9	—	10.8	12.6	16.5	12.5

Table III-9

Mother's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Dentists

Mother's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	3.2	6.6	3.3	6.7	4.5	6.5	4.2	5.6	4.3
Some high school	7.8	13.7	7.8	9.2	29.2	10.7	8.1	21.2	8.7
High school graduate	41.2	31.5	40.8	46.7	22.4	43.0	42.2	27.1	41.5
Postsecondary school other than college	7.3	3.3	7.2	7.6	2.8	7.2	7.4	3.1	7.2
Some college	18.1	18.1	18.1	16.3	11.1	16.9	17.6	14.8	17.5
College degree	16.8	11.2	15.6	10.7	17.9	11.2	14.6	14.5	14.4
Some graduate school	1.6	5.0	1.7	1.1	4.3	1.3	1.5	4.6	1.6
Graduate degree	5.2	10.5	5.4	3.8	7.8	4.1	4.8	9.2	5.0
1972:									
Grammar school or less	3.3	7.7	3.5	8.4	—	7.6	4.0	6.3	4.2
Some high school	9.6	22.8	10.4	15.1	—	19.0	10.6	30.1	11.7
High school graduate	47.1	39.0	46.7	36.4	—	34.4	45.5	32.6	44.9
Some college	18.8	12.5	18.5	17.7	—	17.4	18.7	12.6	18.4
College degree	14.0	7.3	13.7	16.8	—	18.8	14.4	6.5	14.0
Some graduate school	2.7	2.3	2.6	3.1	—	2.9	2.7	1.8	2.7
Graduate degree	4.3	8.6	4.5	2.5	—	2.8	4.1	8.1	4.3
1966:									
Grammar school or less	3.9	.8	3.7	2.9	—	2.3	3.8	.6	3.7
Some high school	9.2	30.4	9.6	12.2	—	12.5	9.5	30.7	9.6
High school graduate	45.3	29.5	44.8	39.3	—	38.3	44.7	27.0	44.2
Some college	22.3	20.6	22.2	34.1	—	33.5	23.4	19.9	23.3
College degree	16.9	15.8	16.9	8.3	—	8.8	16.1	16.8	16.1
Postgraduate degree	2.6	13.6	2.9	3.2	—	4.1	2.6	15.6	2.8

The fathers of black aspiring dentists tended to be less educated than did the fathers of nonblacks: 23.3 percent of blacks but 39.6 percent of nonblacks reported that their fathers had graduated from college. Nonblack men were most likely to report that their fathers had a college education while black men were least likely to do so, with the educational level of the fathers of both nonblack and black women falling in between.

The educational level of the mothers of aspiring dentists was generally lower than that of the fathers but similar to that of the mothers of freshmen-in-general: In 1974, 21 percent of the mothers of aspiring dentists were college graduates as compared with 20.2 percent of the mothers of all freshmen. Interestingly, the mothers of black aspiring dentists were better educated than the mothers of nonblack students. Further, the racial/ethnic difference was most striking among women: 30 percent of the mothers of black, but only 15.6 percent of the mothers of nonblack, aspiring dentists were college graduates. Finally, a comparison with earlier years clearly shows that, in 1974, aspiring dentists were coming from less-educated backgrounds than in 1966, although, again, the educational level of their parents was above average.

Only about one-fourth of aspiring dentists, compared with about one-fifth of aspiring physicians and 27.7 percent of all freshmen, had fathers who could be classified as blue-collar workers. One-third of the fathers of dentists were business managers, while the great majority of the rest were professionals (Table III-10).

Further, 4.1 percent said their fathers were themselves dentists, and another 3.2 percent said their fathers worked in other health professions.

Table III-10

Father's Occupation, by Race and Sex—1974 Aspiring Dentists

Father's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	2.2	.5	2.1	1.8	1.1	1.8	2.1	.8	2.0
Dentist	4.5	2.6	4.5	3.0	3.9	3.1	4.1	3.2	4.1
Pharmacist	.8	.0	.7	.8	.0	.7	.8	.0	.7
Optometrist	.2	.0	.2	.2	.0	.2	.2	.0	.2
Veterinarian	.4	.0	.3	.0	.0	.0	.3	.0	.3
Nurse	.0	.0	.0	.0	.0	.0	.0	.0	.0
Home economist/dietician	.0	.0	.0	.0	.0	.0	.0	.0	.0
Health technician or technologist	.5	1.6	.5	.5	.0	.4	.5	.8	.5
Therapist	.0	.0	.0	.0	.0	.0	.0	.0	.0
Artist	.3	.0	.3	.7	.0	.6	.4	.0	.4
Business manager	35.3	24.5	35.0	29.6	15.5	28.6	33.7	20.1	33.2
Clergy	.5	3.2	.6	.5	.0	.5	.5	1.6	.6
Educator (college)	1.3	1.8	1.3	.2	.8	.2	1.0	1.3	1.0
Educator (secondary)	3.0	3.1	3.0	1.7	8.5	2.2	2.6	5.7	2.8
Educator (elementary)	.3	.0	.3	1.0	1.1	1.0	.5	.5	.5
Education (special)	.2	.0	.2	.2	.0	.2	.2	.0	.2
Engineer	7.1	1.6	6.9	8.1	2.5	7.7	7.3	2.0	7.1
Farmer/forester	2.1	3.2	2.1	3.6	3.3	3.6	2.5	3.2	2.5
Lawyer	1.2	2.8	1.3	.4	.0	.4	1.0	1.4	1.0
Research scientist	1.0	.0	1.0	1.0	.0	.9	1.0	.0	1.0
Skilled worker	17.6	14.1	17.5	19.5	14.8	19.2	18.1	14.4	18.0
Unskilled worker	5.5	20.5	5.9	7.3	18.2	8.0	6.0	19.4	6.5
Other professional[a]	4.3	1.8	4.2	2.1	2.7	2.1	3.7	2.2	3.6
Other nonprofessional[b]	10.9	16.8	11.1	18.4	19.2	18.6	12.4	17.5	12.6
Unemployed	1.0	2.8	1.0	1.6	7.8	2.0	1.2	4.8	1.3

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

Just over one in twenty aspiring dentists reported that their mothers also worked in a health field, mostly as nurses; one in ten said their mothers worked in business occupations; and 7.4 percent said their mothers were teachers (Table III-11). Three out of five mothers, however, were grouped in the category which included homemakers.

In summary, freshmen--especially nonblacks--interested in dentistry as a career had parents whose income and educational levels were higher than those of freshmen-in-general but not as high as those reported by aspiring physicians. Black women, who constituted only 2.2 percent of all aspiring dentists, were more

Table III-11

Mother's Occupation, by Race and Sex--1974 Aspiring Dentists

Mother's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dentist	.1	.0	.1	.1	.0	.1	.1	.0	.1
Pharmacist	.1	.0	.1	.0	.0	.0	.0	.0	.0
Optometrist	.0	.0	.0	.0	.0	.0	.0	.0	.0
Veterinarian	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nurse	4.3	2.1	4.2	5.2	5.6	5.3	4.5	3.9	4.5
Home economist/dietician	.3	1.0	.4	.8	.0	.8	.5	.5	.5
Health technician or technologist	.1	.0	.1	1.3	1.8	1.4	.5	.9	.5
Therapist	.1	.0	.1	.1	.0	.1	.1	.0	.1
Artist	.3	.0	.3	1.4	.0	1.3	.6	.0	.6
Business manager	9.7	12.2	9.7	14.7	8.3	14.2	11.0	10.2	11.0
Clergy	.1	.0	.1	.0	.0	.0	.1	.0	.1
Educator (college)	.4	1.7	.5	.2	1.5	.3	.3	1.6	.4
Educator (secondary)	1.9	6.9	2.1	1.2	4.9	1.5	1.7	5.9	1.9
Educator (elementary)	4.2	10.4	4.4	2.4	6.2	2.7	3.7	8.4	3.9
Education (special)	1.3	1.1	1.3	.8	5.7	1.2	1.1	3.4	1.2
Engineer	.1	.0	.1	.0	.0	.0	.0	.0	.0
Farmer/forester	.0	.5	.0	.1	.0	.1	.0	.3	.0
Lawyer	.1	.0	.1	.0	.0	.0	.1	.0	.1
Research scientist	.1	.0	.0	.0	1.0	.1	.0	.5	.1
Skilled worker	1.3	5.6	1.5	.3	.0	.3	1.0	2.8	1.1
Unskilled worker	2.5	11.0	2.8	3.6	3.8	3.7	2.8	7.5	3.0
Other professional[a]	1.8	1.9	1.8	1.2	3.1	1.3	1.6	2.4	1.6
Other nonprofessional[b]	62.4	38.7	61.7	58.7	47.8	57.9	61.4	43.2	60.6
Unemployed	8.9	6.9	8.8	8.1	10.2	8.2	8.7	8.3	8.7

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

likely than other subgroups to be married and to have college-educated mothers. Blacks of both sexes, however, came from significantly less affluent backgrounds than nonblacks.

College Finances

As was mentioned in Chapter II, recent court decisions have ruled that parents are not necessarily required to contribute toward the college education of children who have reached the age of majority (Choate v. Choate, 189 S.E. 2d 647). With nearly four out of five states now designating 18 as the legal age of adulthood, and with federal student aid programs imposing a strict ceiling on family income in the awarding of federal grants, 18.2 percent of entering freshmen in 1974 claimed "financial independence."

Among aspiring dentists in 1974, 15.6 percent claimed to be financially independent (Table III-12). Black men were twice as likely as nonblack men to claim financial independence from their parents (31.3 percent versus 14.2 percent). Black women were only slightly more likely to claim financial independence than were nonblack women (22.4 percent versus 17.3 percent).

Table III-12

Financial Independence from Parents, by Race and Sex--1974 Aspiring Dentists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Financial independence THIS year:									
No	85.8	68.7	85.3	82.7	77.6	82.3	85.0	73.0	84.4
Yes	14.2	31.3	14.7	17.3	22.4	17.7	15.1	27.0	15.6
Financial independence LAST year:									
No	91.2	83.7	91.0	86.5	78.5	85.9	89.9	81.1	89.5
Yes	8.8	16.4	9.0	13.5	21.5	14.1	10.1	18.9	10.5

Like most other students, a majority (76.4 percent) of aspiring dentists relied heavily on their parents to help finance their first year in college (Table III-13). Nonblacks were more likely than were blacks to expect financial help from their parents (77.3 percent versus 59.1 percent); further, nonblacks expected to receive, on the average, nearly twice as much money as did blacks ($1,056 versus $607). Considering the difference in the median parental incomes of blacks and nonblacks, these findings are not surprising; in fact, the proportions of annual parental income expected to go for the first year of college by black and nonblack aspiring dentists were almost identical: i.e., 6 percent of the total.

Among blacks, 60.3 percent of the men and 54 percent of the women relied on their parents for financial help during the first

Table III-13

Anticipated Sources and Amounts of Financial Support for First Year of College, by Race and Sex--1974 Aspiring Dentists

		Men			Women			Total		
		Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Parental, or family aid or gifts	%	77.8	60.3	77.2	75.9	54.0	74.6	77.3	59.1	76.4
	(Medn.)	$1,152	$619	$1,133	$898	$592	$885	$1,056	$607	$1,033
Basic Educational Opportunity Grants	%	14.1	53.8	15.4	16.0	39.5	17.8	14.6	46.9	16.1
	(Medn.)	$448	$809	$481	$436	$856	$478	$444	$824	$480
Supplemental Educational Opportunity Grants	%	3.5	7.7	3.6	4.0	17.3	5.0	3.6	12.3	4.0
	(Medn.)	$670	$379	$651	$427	$608	$471	$598	$534	$586
College Work Study grant	%	4.8	18.0	5.3	8.0	10.4	8.2	5.7	14.3	6.1
	(Medn.)	$498	$419	$486	$437	$342	$427	$472	$388	$461
State scholarship or grant	%	13.2	12.8	13.2	8.4	15.2	8.9	11.9	13.9	12.0
	(Medn.)	$599	$1,075	$614	$506	$669	$556	$582	$773	$600
Local or private scholarship or grant	%	10.9	16.8	11.1	13.8	13.0	13.7	11.7	15.0	11.8
	(Medn.)	$499	$824	$457	$333	$393	$336	$404	$489	$408
Federal Guaranteed Student Loan	%	6.7	14.2	7.0	5.4	5.4	5.4	6.4	9.9	6.3
	(Medn.)	$1,067	$460	$1,027	$776	$774	$776	$1,019	$557	$979
National Direct Student Loan	%	5.5	9.9	5.6	2.4	8.5	3.0	4.7	9.3	4.9
	(Medn.)	$699	$852	$711	$628	$607	$619	$691	$801	$700
Other loan	%	2.6	6.5	2.7	3.6	3.3	3.6	2.9	4.9	3.0
	(Medn.)	$838	$1,200	$864	$605	$1,062	$627	$738	$1,194	$768
Full-time work	%	8.5	2.2	8.3	5.7	.9	5.3	7.7	1.6	7.5
	(Medn.)	$778	$392	$774	$364	$250	$363	$696	$312	$691
Park-time or summer work	%	60.0	37.9	59.2	53.9	32.3	52.2	58.3	35.3	57.3
	(Medn.)	$493	$305	$486	$382	$267	$375	$458	$289	$451
Savings	%	49.1	22.9	48.3	43.4	20.8	41.7	47.5	21.9	46.4
	(Medn.)	$413	$297	$411	$395	$275	$388	$408	$287	$405
Spouse	%	1.2	.6	1.2	.4	--	.3	1.0	.2	.9
	(Medn.)	> $4,000	$250	> $4,000	$2,091	--	$2,091	> $4,000	$250	> $4,000
Your G.I. benefits	%	.6	--	.6	.1	--	.0+	.5	--	.4
	(Medn.)	> $4,000	--	> $4,000	$750	--	$750	> $4,000	--	> $4,000
Your parent's G.I. benefits	%	1.4	5.9	1.5	.5	1.7	.6	1.1	3.9	1.3
	(Medn.)	$1,562	$250	$1,271	$2,800	$499	$2,480	$1,770	$280	$1,385
Social security dependent's benefits	%	2.5	10.1	2.8	6.8	11.3	7.1	3.7	10.7	4.1
	(Medn.)	$966	$250	$766	$662	$250	$572	$751	$250	$627
Other	%	2.5	3.8	2.6	1.5	4.1	1.7	2.2	4.0	2.3
	(Medn.)	$1,467	$865	$1,380	$374	$568	$402	$981	$729	$904

year of their college education; the difference in parental support was minimal, only $27. Nonblack women, on the other hand, expected to receive $254 less than did the nonblack men.

As was the case with aspiring physicians, blacks were more likely than were nonblacks to participate in federal student aid programs: The participation rates were 46.9 percent for blacks but 14.6 percent for nonblacks in BEOG, 12.3 percent for blacks but 3.6 percent for nonblacks in SEOG, and 14.3 percent for blacks but 5.7 percent for nonblacks in CWS. Only in the BEOG program, however, was the average grant to blacks higher than the average grant to nonblacks. The subgroup of students benefiting most from the BEOG funds appeared to be black men, with 53.8 percent participating for an average grant of $809; the participation rate for black women was lower (39.5 percent), but the average award slightly higher ($856).

State scholarships went to just over one in ten of the aspiring dentists, with blacks receiving larger average grants than did nonblacks. Local or private scholarships went to 15 percent of the black but only 11.7 percent of the nonblack aspiring dentists, again with blacks receiving slightly larger grants. Thus, federal, state, and local/private scholarship programs seem to reach larger proportions of black than nonblack students, compensating partially for the lower socioeconomic background of the former.

Students planning to take loans constituted a very small group (ranging from 2 percent to 14 percent), although the average amount considered went as high as $1,194. Full-time work was contemplated by only 7.5 percent of aspiring dentists as a way of financing their freshman year, but close to three-fifths (considerably more nonblacks than blacks) planned to earn money through part-time work or summer employment. Nearly half the nonblacks but only one-fifth of the blacks planned to use their savings, and fewer than 1 percent of the total group counted on their spouses. G.I. benefits, Social Security benefits, and "other" sources met the financial needs of very few aspiring dentists.

Even though blacks were getting larger shares of federal, state, and local student aid, their disadvantaged socioeconomic background was reflected in their responses to a question about whether they had any concern regarding their ability to finance a college education. Fully three out of ten blacks but just over one in ten nonblacks said that they had major concern over their ability to pay for college (Table III-14); the proportion of the

Table III-14

Concern Over Financing College Education, by Race and Sex--1974, 1972, and 1966 Aspiring Dentists

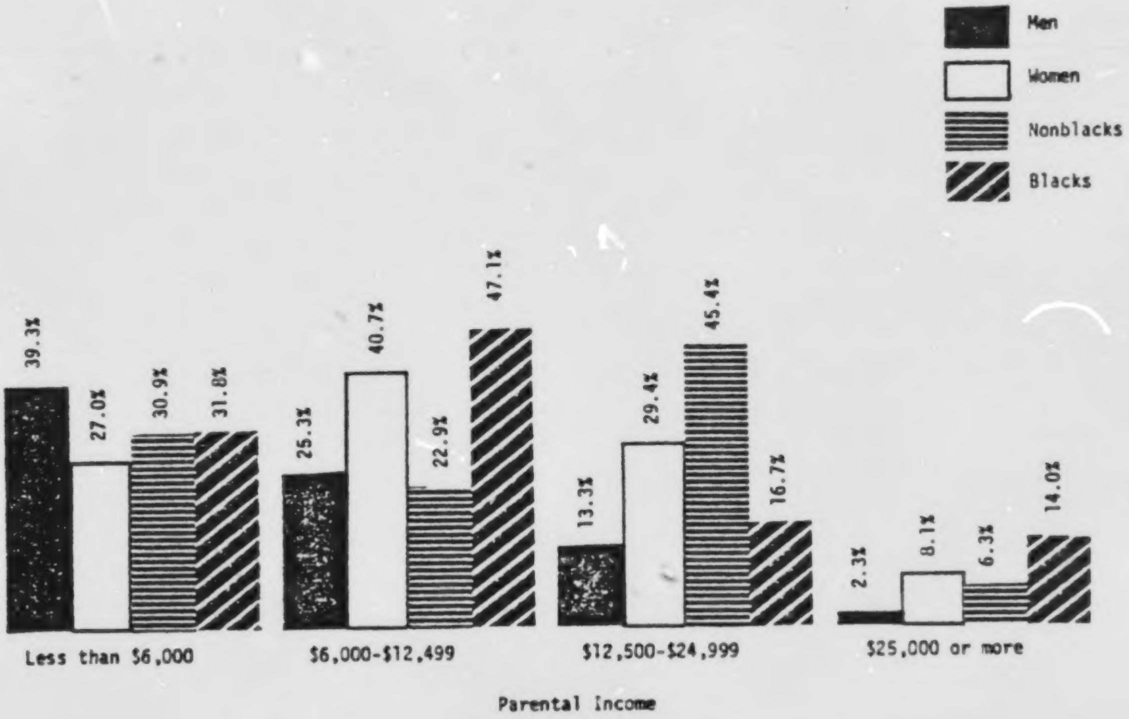
	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
No concern	41.5	26.3	41.0	43.7	25.0	42.3	42.1	25.6	41.4
Some concern	45.3	37.8	45.1	42.9	50.3	43.4	44.6	43.9	44.6
Major concern	13.2	36.0	13.9	13.5	24.7	14.3	13.3	30.5	14.0
1972:									
No concern	38.8	27.5	38.3	46.3	--	45.8	39.9	30.4	39.4
Some concern	50.0	41.0	49.6	43.8	--	42.4	49.1	37.9	48.5
Major concern	11.2	31.4	12.2	10.0	--	11.8	11.0	31.6	12.1
1966:									
No concern	37.7	23.9	37.3	42.0	--	42.2	38.2	25.8	37.8
Some concern	56.4	62.5	56.6	54.0	--	53.4	56.2	59.7	56.3
Major concern	5.9	13.7	6.1	4.0	--	4.5	5.7	14.5	5.9

total 1974 freshman class worrying over finances was 14.7 percent. The most concerned group was black men (36 percent), followed by black women (24.7 percent). Over two out of five nonblacks, on the other hand, stated that they had no concern whatsoever regarding their ability to finance their college education. Nonetheless, the proportion of students expressing such concern had doubled since 1966, partially reflecting the increasing costs of college education.

As was to be expected, concern regarding ability to pay for college was related to parental income (Figures III-2 and

FIGURE III-2

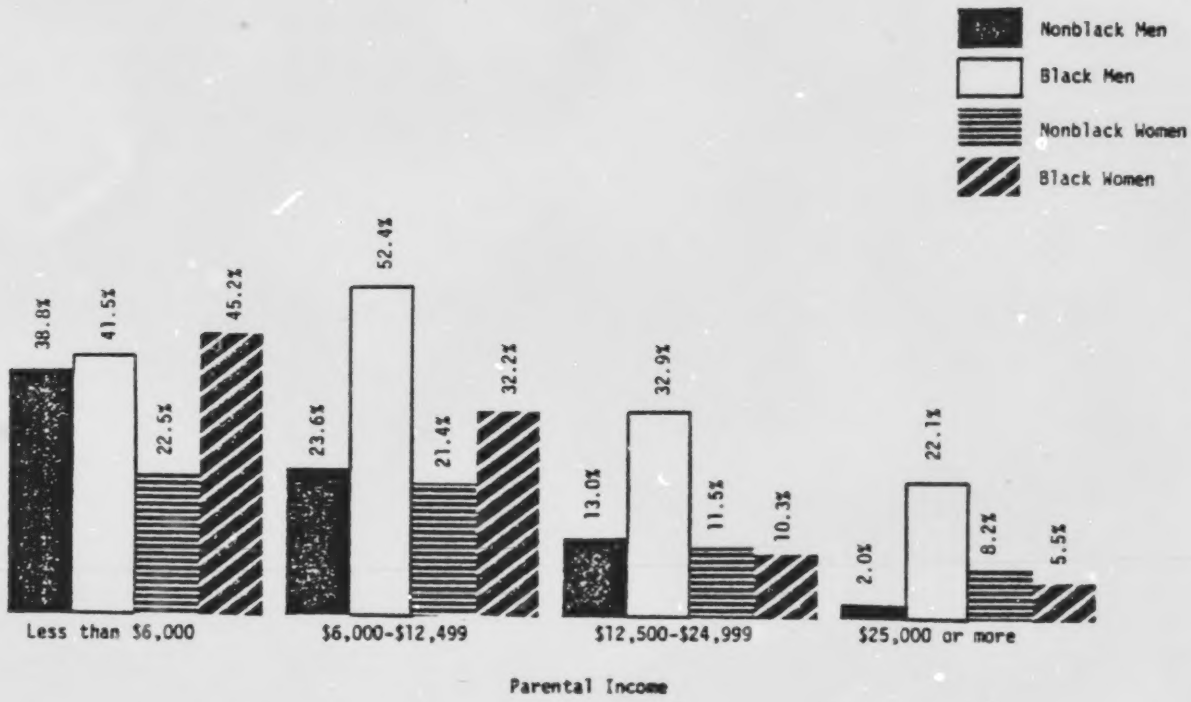
Proportion Reporting Major Concern Over Financing College Education by Sex, Race, and by Parental Income--1974 Aspiring Dentists



III-3): The students from higher income groups showed less concern than did students from lower income groups. Among nonblacks, however, aspiring dentists in the mid-income category of $12,500 to $24,999 were much more likely to express concern over their ability to finance their college education than were nonblacks coming from less affluent backgrounds. Students in this range do not qualify for federal student aid programs, yet their parental or personal income is evidently not sufficient to take care of their college expenses. This finding supports the contention that the increasing costs of college attendance have placed an undue

FIGURE III-3

Proportion Reporting Major Concerns Over Financing College Education by Sex, by Race, and by Parental Income--1974 Aspiring Dentists



burden on middle-income families.

Self-Ratings

Asked to rate themselves on a variety of traits "as compared with the average student of your own age," aspiring dentists projected a very confident and positive self-image (Table III-15).

Table III-15

Self-Ratings,ª by Race and Sex--1974 Aspiring Dentists and All Freshmen

Trait	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Academic ability	73.4	56.1	73.2	49.6	38.0	48.8	66.6	52.8	66.2	53.0
Athletic ability	61.0	73.1	61.3	29.4	27.4	29.0	52.0	50.3	52.0	38.5
Artistic ability	17.0	45.7	17.9	24.4	10.9	23.4	19.1	29.1	19.6	19.5
Cheerfulness	53.7	55.1	53.8	64.4	56.6	63.9	56.8	56.9	56.7	52.2
Defensiveness	28.9	40.9	29.2	29.5	35.4	29.8	29.0	38.3	29.3	27.1
Drive to achieve	73.8	70.2	73.9	63.5	66.7	63.7	70.9	72.1	71.1	59.9
Leadership ability	53.2	52.0	53.1	40.5	38.1	40.3	49.6	46.0	49.5	41.3
Mathematical ability	48.6	30.3	48.2	26.7	27.3	26.6	42.6	28.8	42.0	33.4
Mechanical ability	42.3	28.0	41.9	10.9	9.9	10.8	33.5	19.1	32.9	23.8
Originality	42.9	56.3	43.3	41.1	42.4	40.3	42.1	48.9	42.4	37.4
Physical attractiveness	40.2	66.4	41.1	29.8	43.3	29.9	37.1	56.7	37.9	26.1
Political conservatism	14.0	8.4	13.7	10.2	5.9	9.9	12.9	7.2	12.6	10.5
Political liberalism	22.1	12.8	21.7	14.3	23.8	15.0	19.9	17.7	19.8	20.1
Popularity	43.9	66.4	43.6	30.3	39.1	31.0	39.5	52.5	40.0	30.2
Popularity with opposite sex	41.5	66.5	42.3	31.1	51.2	32.5	38.6	59.0	39.5	29.4
Public speaking ability	25.3	38.9	25.7	18.4	17.4	16.5	22.6	28.4	22.8	20.7
Intellectual self-confidence	57.4	68.5	57.6	29.4	50.1	31.0	49.6	59.6	50.0	40.7
Social self-confidence	48.4	56.7	48.6	32.6	49.8	33.8	43.8	53.0	44.3	33.9
Sensitivity to criticism	24.2	26.9	24.3	27.1	38.3	27.7	25.1	30.8	25.2	25.1
Stubbornness	36.3	29.6	36.2	39.2	38.4	38.6	36.5	30.1	36.1	36.9
Understanding of others	67.1	79.1	67.3	60.3	62.8	60.6	67.6	71.0	67.5	66.9
Writing ability	30.3	28.8	30.4	26.1	32.7	26.5	29.1	34.6	29.3	30.5

The trait that received the largest endorsement was drive to achieve, with 63.7 percent of women and 73.9 percent of men rating themselves as above average or among the top 10 percent, in contrast with about three-fifths of all freshmen. The other traits that were endorsed more often by aspiring dentists than by freshmen-in-general were academic ability (66.2 percent versus 53 percent), athletic ability (52 percent versus 38.5 percent), intellectual self-confidence (50 percent versus 40.7 percent), leadership ability (49.5 percent versus 41.3 percent), mathematical ability (42 percent versus 33.4 percent), and mechanical ability (32.9 percent versus 23.8 percent).

Aspiring dentists were also much more confident about their social prowess than were freshmen-in-general: They rated themselves above average in social self-confidence (44.3 percent versus 33.9 percent of all freshmen), popularity (40 percent versus 30.2 percent), popularity with the opposite sex (39.5 percent versus 29.4 percent), and physical attractiveness (37.9 percent versus 26.1 percent).

Men tended to give themselves high ratings on many more positive traits than did women, while the racial/ethnic difference in self-ratings depended on the individual item and on sex. For instance, black men were much more likely than were nonblack men to give themselves high ratings on social and intellectual self-confidence, popularity (including with the opposite sex), and physical attractiveness. Black men were also more likely than were nonblacks to rate themselves high both on athletic and artistic abilities. Nonblack men, on the other hand, displayed more confidence regarding their academic, mathematical, and mechanical abilities. The racial/ethnic differences among women were smaller, with black women more likely than nonblacks to give themselves high ratings on physical attractiveness, popularity, and self-confidence.

Life Goals

Respondents to the survey questionnaire were asked to indicate the importance they gave to a number of possible life goals.

These questions generally differentiate students interested in pursuing different occupational goals. In a study of the 1970 career choices of 1966 freshmen, it was found that college students aspiring to become dentists were more likely than were other health-career aspirants to emphasize materialistic over altruistic life goals and to give high priority to being successful in their own business and being well-off financially (Holmstrom, 1975, p. 15).

True to form, 1974 aspiring dentists were more likely than were other students to endorse such life goals as being successful in their own business (69.5 percent, in contrast to only 37.9 percent of all freshmen) and being very well-off financially (62.2 percent versus 45.8 percent of all freshmen) (Table III-16). Helping others in difficulty, which was the most popular life goal with aspiring physicians (81.9 percent), was endorsed by three out of five aspiring dentists. Three out of five also gave high priority to becoming an authority in their field and raising a family. Interestingly, only 51.6 percent of black, but 61.5 percent of nonblack, women endorsed this life goal, suggesting that nonblack women among aspiring dentists came from more traditional backgrounds than did black women.

Achieving a meaningful philosophy of life was the last life goal that was rated higher by more than half the aspiring dentists; the rest of the life goals received scattered endorsements, with the goal of writing original works at the bottom (6.9 percent of aspiring dentists, but 13.3 percent of all freshmen).

Table III-16

Life Goals,[a] by Race and Sex--1974 Aspiring Dentists and All Freshmen

Life Goal	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	7.6	9.4	7.6	9.8	4.8	9.5	8.2	7.3	8.2	11.4
Becoming an authority in my field	68.2	86.5	68.8	57.5	64.1	57.9	65.5	76.1	65.6	62.2
Obtaining recognition from my colleagues for contributions to my special field	43.3	54.9	43.7	34.2	37.1	34.5	40.8	46.3	41.1	39.0
Influencing the political structure	8.7	20.8	9.1	5.4	4.0	5.3	7.8	12.8	7.9	12.5
Influencing social values	20.0	32.1	20.3	25.0	16.4	24.4	21.3	24.8	21.4	27.2
Raising a family	61.7	65.3	61.9	61.5	51.6	60.8	61.7	58.9	61.5	55.0
Having administrative responsibility for the work of others	22.4	39.8	23.0	25.3	31.8	25.9	23.3	36.3	23.8	25.6
Being very well-off financially	67.5	74.2	62.7	48.1	60.4	47.8	62.0	67.5	62.2	45.8
Helping others who are in difficulty	59.2	73.8	59.7	70.9	58.1	69.9	62.5	66.5	62.6	61.3
Making a theoretical contribution to science	23.0	43.6	23.7	15.4	22.2	15.8	20.9	33.5	21.4	13.0
Writing original works (poems, novels, short stories, etc.)	5.7	11.0	5.8	9.9	7.0	9.7	6.8	9.1	6.9	11.9
Creating artistic work (painting, sculpture, decorating, etc.)	7.1	14.2	7.2	16.3	8.8	15.8	9.6	12.1	9.7	13.9
Being successful in a business of my own	80.0	74.0	79.7	43.0	59.9	44.1	69.6	67.5	69.5	37.9
Becoming involved in programs to clean up the environment	23.1	38.3	23.6	26.2	17.0	25.4	24.0	28.1	24.1	25.9
Developing a meaningful philosophy of life	55.6	67.4	55.9	62.5	56.5	62.0	57.5	62.3	57.7	61.1
Participating in a community action program	21.9	47.1	22.7	29.5	26.3	29.3	24.0	36.9	24.6	27.5
Keeping up to date with political affairs	38.7	41.8	38.7	28.8	17.1	27.5	35.7	29.9	35.4	36.6

[a] Life goals rated as "Very important" or essential."

There were other racial/ethnic as well as sex differences in the importance attached to various life goals. For instance, becoming an authority in one's field and being very well-off financially were more important to blacks (particularly black men) than to nonblacks. Blacks were also more likely than were nonblacks to be interested in making a theoretical contribution to science, being involved in community action programs, and receiving recognition from colleagues. Nonblacks, on the other hand, were more interested in keeping politically up-to-date.

Among aspiring dentists, women were generally less concerned than were men with such instrumental and career-oriented life goals as receiving recognition from colleagues, being very well-off financially, making a theoretical contribution to science, becoming an authority in their field, or being successful in their own business; they were more interested in helping others in difficulty, having a meaningful philosophy of life and participating in community action programs.

Identity Groups

Asked to indicate which of a number of groups they identified with, aspiring dentists gave responses similar to those of aspiring physicians and of freshmen-in-general (Table III-17). The group most commonly cited (73.3 percent) was "people of my own generation," followed by "people of my own race or ethnic group" (with 65.8 percent of blacks and 45.3 percent of nonblacks endorsing this), and "people of my own sex" (34.1 percent). Only one-fourth

Table III-17

Identity Groups, by Race and Sex--1974 Aspiring Dentists and All Freshmen

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
People who live in my community										
Strongest of all	14.9	18.5	15.0	14.1	13.0	14.0	14.7	15.8	14.7	13.6
Strongly	31.6	21.8	31.3	32.4	27.9	32.1	31.8	24.7	31.5	28.6
Moderately	41.6	51.7	41.9	40.4	46.2	40.8	41.3	49.0	41.6	44.0
Little or none	11.9	8.0	11.7	13.1	12.9	13.1	12.2	10.4	12.1	13.8
People of my own religion										
Strongest of all	5.2	8.2	5.3	8.1	11.2	8.3	6.0	9.6	6.2	6.7
Strongly	17.0	12.6	16.9	20.0	11.2	19.4	17.9	12.0	17.6	16.1
Moderately	41.4	41.9	41.4	42.6	61.7	43.9	41.7	51.3	42.1	42.7
Little or none	36.4	37.3	36.4	29.3	15.9	28.3	34.4	27.1	34.1	34.6
People of my own sex										
Strongest of all	1.9	6.0	2.1	3.0	13.6	3.8	2.2	9.7	2.6	3.5
Strongly	30.0	27.8	29.9	36.1	27.6	35.5	31.7	27.7	31.5	32.8
Moderately	60.5	42.9	60.0	54.4	43.1	53.6	58.8	43.0	58.1	56.1
Little or none	7.5	23.3	8.0	6.4	15.6	7.1	7.2	19.5	7.8	7.5
People of my own race or ethnic group										
Strongest of all	7.6	37.0	8.5	5.7	36.3	8.0	7.1	36.7	8.4	8.2
Strongly	38.0	21.5	37.5	38.8	36.9	38.7	38.2	29.1	37.8	34.4
Moderately	44.2	40.9	44.1	44.7	19.7	42.8	44.3	30.4	43.7	45.5
Little or none	10.2	.6	9.9	10.8	7.0	10.5	10.4	3.8	10.1	11.9
People of my own generation										
Strongest of all	30.5	27.2	30.4	29.7	39.8	30.4	30.2	33.4	30.4	29.1
Strongly	44.6	41.5	44.5	38.5	44.1	38.9	42.9	42.8	42.9	42.6
Moderately	21.8	30.2	22.1	28.6	9.7	27.3	23.8	20.2	23.6	25.1
Little or none	3.1	1.1	3.1	3.2	6.4	3.4	3.1	3.6	3.2	3.1

of the aspiring dentists said they identified "strongly" or "strongest of all" with "people of my own religion."

College Choice

Asked to indicate their reasons for choosing a particular college, aspiring dentists as a group gave more emphasis to the academic reputation of the institution than did students in the total freshman class (56.4 percent versus 50.4 percent) (Table III-18); the institutions' academic reputation, however, was even more important to aspiring physicians, seven out of ten of whom endorsed this as a very important factor in their college choice.

The availability of special educational programs was particularly important to nonblack women (52.2 percent), followed by black women (38.1 percent); only one out of four men endorsed this as an important consideration in their college choice. Among freshmen-in-general, men were also less likely to consider this as an important factor (25 percent of men versus 36.3 percent of women).

Low tuition was an important consideration for about one in four aspiring dentists, with women showing slightly more concern than did men (27.7 percent versus 23.9 percent). The offer of financial assistance was most important to black men (38.3 percent), followed by black women (19.9 percent); only about 14 percent of nonblacks were swayed in their college choice by an offer of financial assistance.

Finally, comparing the 1974 with the 1972 aspiring dentists,

Table III-18

Reasons for College Choice, by Race and Sex--1974 and 1972 Aspiring Dentists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1 9 7 4									
Low tuition:									
Very important	23.8	26.0	23.9	27.6	29.0	27.7	24.9	27.3	25.0
Somewhat important	34.7	33.8	34.7	40.8	26.9	39.9	36.4	30.7	36.2
Not important	41.5	40.2	41.4	31.6	44.2	32.5	38.7	42.0	38.9
Special programs offered:									
Very important	25.2	24.0	25.1	52.2	38.1	51.1	32.6	30.6	32.6
Somewhat important	34.7	43.0	34.9	27.0	28.0	27.1	32.5	36.0	32.7
Not important	40.2	33.1	40.0	20.8	33.9	21.7	34.8	33.4	34.8
Offered financial assistance:									
Very important	14.4	38.3	15.2	13.9	19.9	14.3	14.2	29.9	14.9
Somewhat important	12.0	31.7	12.6	12.2	27.5	13.3	12.1	29.8	12.8
Not important	73.7	30.0	72.2	73.9	52.7	72.4	73.7	40.4	72.3
Very good academic reputation:									
Very important	55.5	57.0	55.5	58.5	59.6	58.6	56.3	58.2	56.4
Somewhat important	36.5	40.4	36.6	35.8	31.2	35.5	36.3	36.3	36.3
Not important	8.0	2.6	7.8	5.7	9.2	6.0	7.4	5.5	7.3
1 9 7 2									
Low tuition:									
Very important	18.8	20.1	18.8	17.9	--	19.1	18.6	23.5	18.9
Somewhat important	28.8	25.2	28.7	31.2	--	31.9	29.2	29.2	29.2
Not important	52.4	54.7	52.5	50.9	--	49.0	52.2	47.4	52.0
Special programs offered:									
Very important	21.9	33.0	22.3	30.9	--	31.6	23.2	34.7	23.7
Somewhat important	33.5	25.1	33.2	25.1	--	25.8	32.3	27.3	32.1
Not important	44.6	42.0	44.5	44.1	--	42.7	44.5	38.0	44.2
Offered financial assistance:									
Very important	12.7	40.6	13.8	9.9	--	10.0	12.3	32.1	13.2
Somewhat important	11.2	6.6	11.0	8.7	--	9.9	10.8	11.4	10.9
Not important	76.1	52.8	75.2	81.5	--	80.1	76.9	56.5	76.0
Very good academic reputation:									
Very important	53.3	61.4	53.6	47.3	--	48.3	52.5	60.4	52.8
Somewhat important	38.1	26.4	37.6	43.4	--	42.4	38.9	28.0	38.4
Not important	8.6	12.3	8.7	9.2	--	9.3	8.7	11.6	8.8

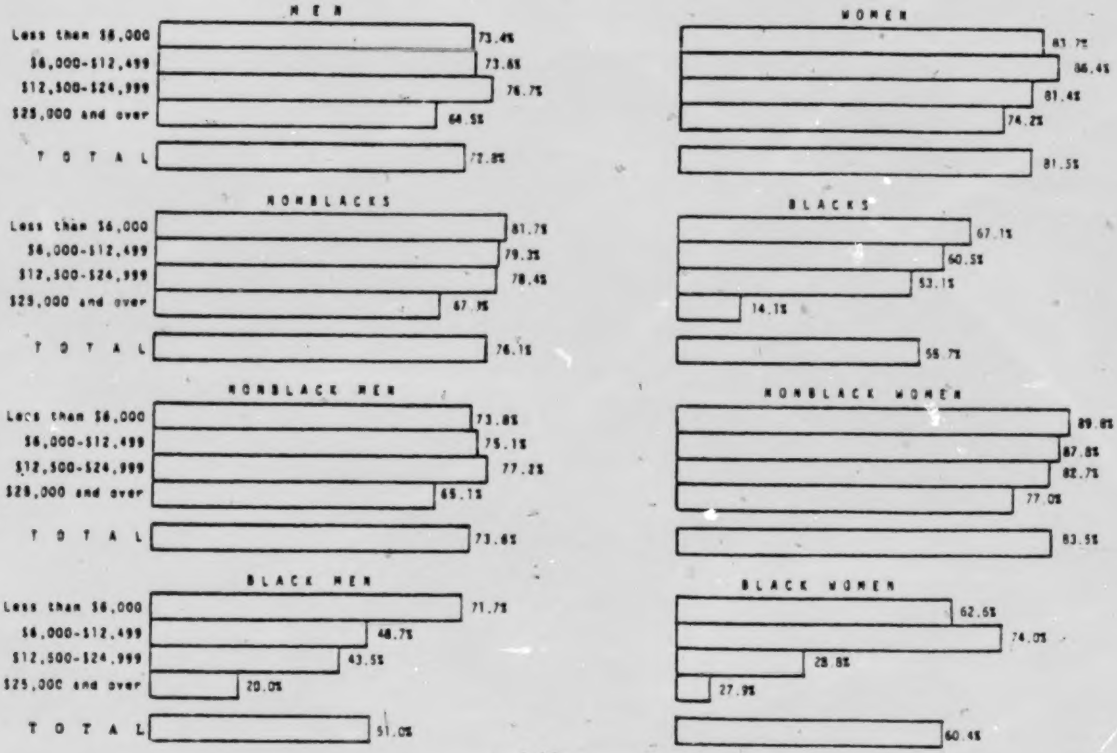
one finds a slight increase in the importance attached to low tuition and to special educational programs, while the importance attached to the academic reputation of institutions and an offer of financial assistance remained relatively unchanged.

Institutional Distribution

In 1974, just over three-fourths of all entering freshmen and the same proportion of aspiring dentists enrolled in public colleges and universities, in contrast to just over half the aspiring physicians (Figure III-4). Men were less likely than

FIGURE III-4

Proportion Enrolled in Public Institutions, by Race and Sex--1974 Aspiring Dentists



were women to attend institutions in the public sector (72.8 percent versus 81.5 percent), and blacks were less likely than were nonblacks to attend public colleges and universities (55.7 percent versus 76.1 percent). This last difference is due partly to the large number of predominantly black colleges in the private sector.

Students from low-income families were more likely than others to enroll in low-cost public institutions: For instance, 81.7 percent of nonblacks with incomes below $6,000, but only 67.9 percent of those with incomes in excess of $25,000, enrolled in public institutions. The corresponding figures for blacks were 67.1 percent and 14.1 percent, respectively. Thus, although the impact of income on institutional enrollment patterns looks more dramatic for blacks than for nonblacks, the difference is again partially attributable to the number of predominantly black colleges in the private sector which traditionally have served low-income as well as high-income blacks.

In 1974, 41 percent of all freshmen were enrolled in two-year colleges, 35 percent in four-year colleges, and only 24 percent in universities. Among aspiring dentists, the corresponding figures were 39.4 percent, 27 percent, and 33.6 percent respectively. Thus, as was the case with aspiring physicians, aspiring dentists were more likely to enroll in universities than were freshmen-in-general.

Among aspiring dentists, women were significantly more likely than were men to enroll in two-year colleges (57.5 percent versus 32 percent), while nonblacks were more likely than were blacks to enroll in universities (34.4 percent versus 17.7 percent), (Figure III-5). Comparing these enrollment patterns with those of 1966 aspiring dentists, we find that the enrollment of blacks in universities increased somewhat over the eight-year period.

The higher the parental income, the less likely the student was to enroll in a two-year college: In 1974, for instance, 60.6 percent of the nonblacks with parental incomes below $6,000, but only 26.2 percent of those with incomes above $25,000, were enrolled in two-year colleges (Figure III-6). Among blacks, 28.2 percent of those from the lowest-income families, but virtually none of those from the highest-income families, were enrolled in two-year colleges. Interestingly, only two years before, nearly half of the highest-income blacks were enrolled in two-year colleges.

Women from low-income families were much more likely to be enrolled in two-year colleges than in four-year colleges and universities (Figure III-7). Nonblack women from higher-income families were still more likely than were black women or men to enroll in two-year colleges. Aspiring health professionals who enroll in two-year colleges may find it difficult to pursue their freshman career plans and may have to lower their aspirations and even switch to a nonhealth field. One problem is that two-year colleges often do not offer appropriate study field majors (such as predentistry); a second is that transferring to a baccalaureate-granting institution may not be easy.

FIGURE III-5

Institutional Attendance Patterns for 1974, 1972, and 1966 Aspiring Dentists, by Race and Sex

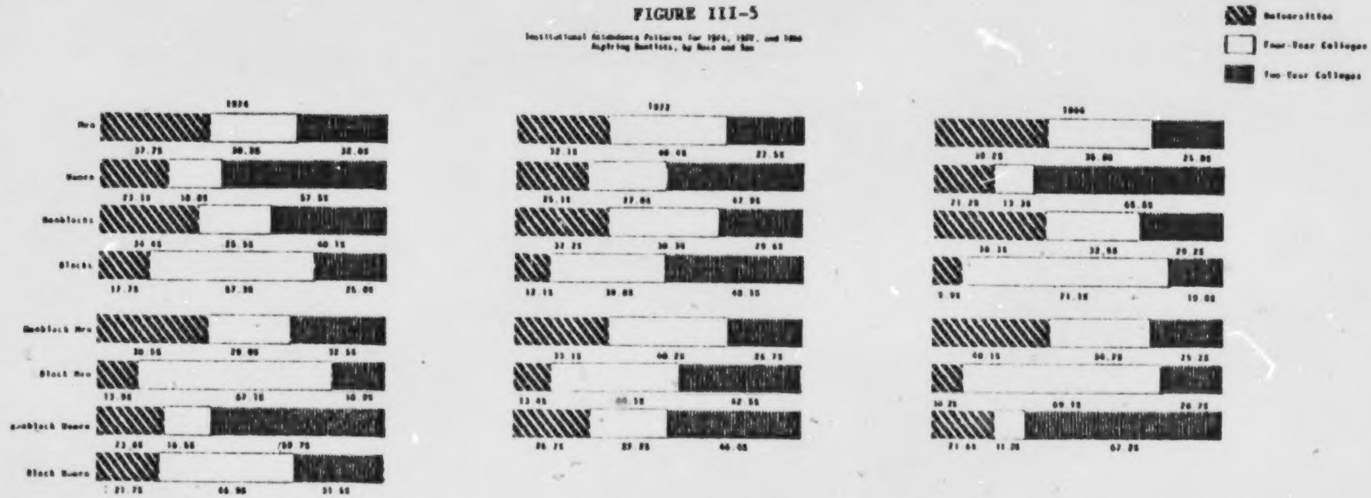


FIGURE III-4

Institutional Attendance Patterns for 1974 and 1972 Aspiring Dentists, by Sex, by Race, and by Parental Income

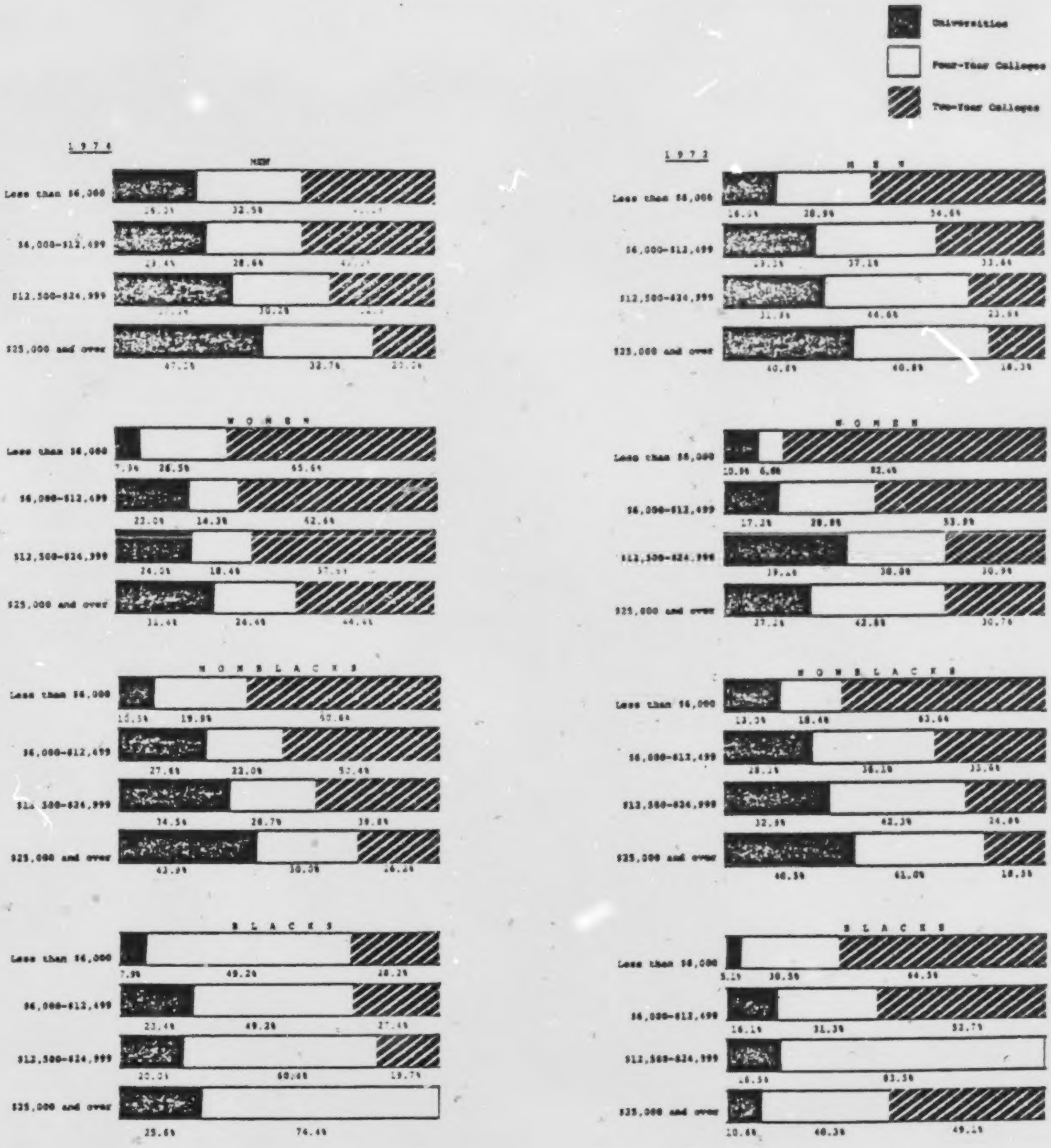
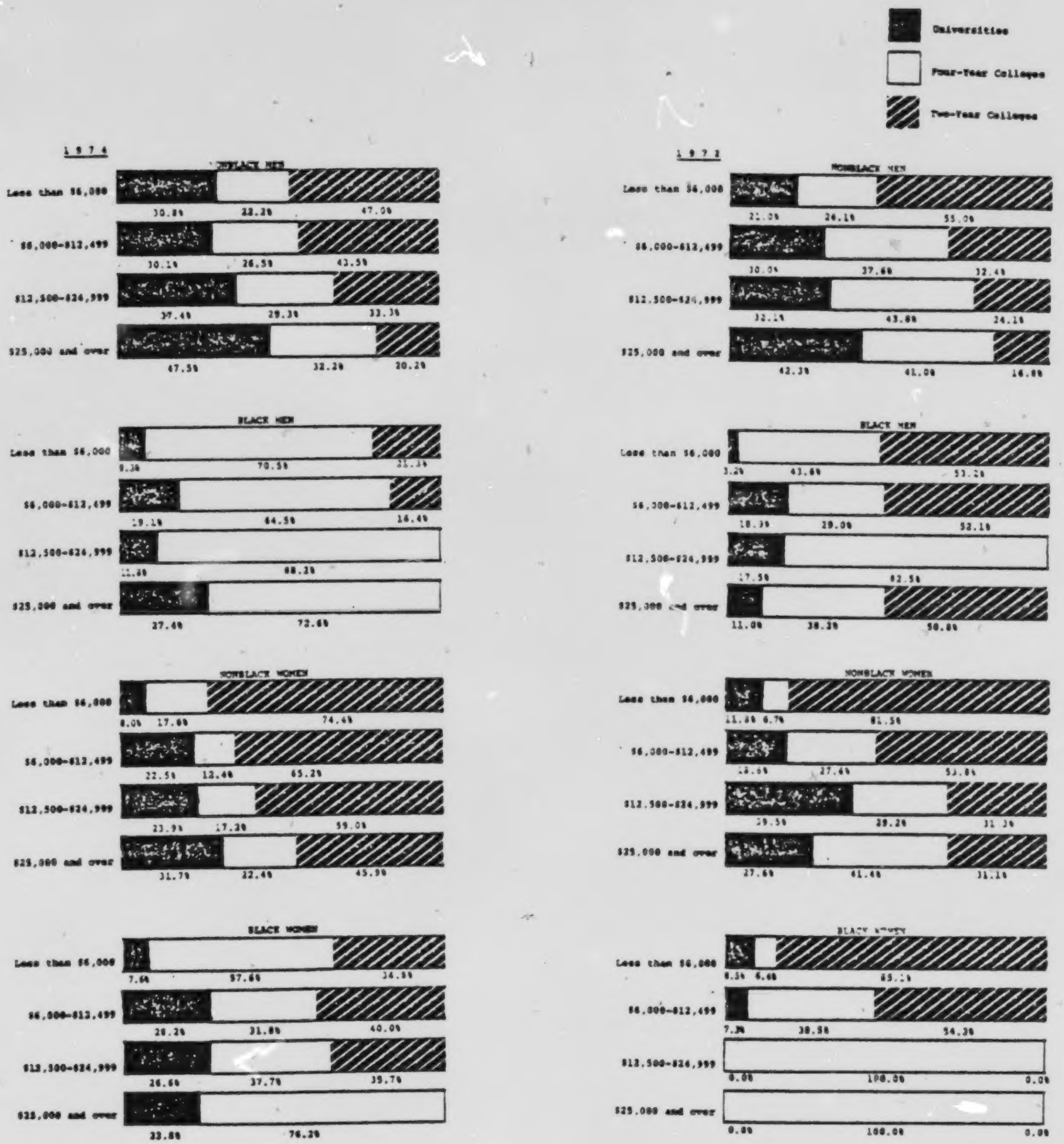


FIGURE III-7

Institutional Attendance Patterns for 1974 and 1972 Aspiring Dentists, by Race and Sex, and by Parental Income



Students attending universities and four-year colleges were more likely than those in two-year colleges to plan to major in study fields that were appropriate to their freshman career goals: For instance, 33.4 percent of aspiring dentists in universities, 32 percent in four-year colleges, but only 11.4 percent in two-year colleges planned to major in biological sciences (Table III-19). Nearly four out of five women aspiring to become den-

Table III-19

Probable Study Field Major, by Race and Sex and by Institutional Type--1974 Aspiring Dentists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University:									
Biological sciences	37.1	19.3	36.9	19.8	16.6	19.6	33.7	17.6	33.4
Health technology	35.9	48.6	36.1	57.3	40.1	56.2	40.2	43.2	40.2
Nursing	--	--	--	--	--	--	--	--	--
Pharmacy	.7	--	.7	--	--	--	.6	--	.6
Therapy	.2	--	.2	.3	3.8	.5	.2	2.4	.3
Other health fields	8.7	--	8.6	14.8	27.3	15.6	9.9	17.3	10.0
Total health fields	82.6	67.9	82.5	92.2	87.8	91.9	84.6	80.5	84.5
Total nonhealth fields	17.4	32.1	17.5	7.8	12.2	8.1	15.4	19.5	15.5
Four-Year College:									
Biological sciences	33.6	35.5	33.7	20.8	44.1	25.2	31.3	39.3	32.0
Health technology	42.2	41.4	36.1	59.6	25.0	53.0	45.3	34.3	44.4
Nursing	--	--	--	--	--	--	--	--	--
Pharmacy	--	--	--	--	--	--	--	--	--
Therapy	--	--	--	--	--	--	--	--	--
Other health fields	9.8	11.4	9.9	12.6	23.2	14.6	10.3	16.5	10.9
Total health fields	85.6	88.3	79.7	92.9	92.3	92.8	86.9	90.0	87.2
Total nonhealth fields	14.4	11.7	20.3	7.1	7.7	7.2	13.1	10.0	12.8
Two-Year College:									
Biological sciences	19.1	--	18.8	1.9	--	1.8	11.7	--	11.4
Health technology	54.4	39.4	54.2	77.9	64.4	77.3	64.5	55.7	64.3
Nursing	--	--	--	.9	15.6	1.5	.4	10.2	.6
Pharmacy	.2	--	.2	--	--	--	.1	--	.1
Therapy	--	--	--	--	--	--	--	--	--
Other health fields	20.9	60.6	21.6	9.2	--	8.8	15.8	21.1	16.0
Total health fields	94.6	100.0	94.7	89.9	80.0	89.5	92.6	86.9	92.4
Total nonhealth fields	5.4	.0	5.3	10.1	20.0	10.5	7.4	13.1	7.6

tists who entered two-year colleges were planning to major in health technology, compared with over half of the women in four-year colleges and universities. It seems very likely that these women will become dental hygienists or technicians instead of dentists.

This observation is supported by the difference in the degree plans of students enrolled in two- and four-year colleges (Table III-20). Among aspiring dentists in two-year colleges, only 8.9 percent of the women but 82.1 percent of the men were planning to get a medical degree. The proportion of women interested in earning a medical degree was 47.6 percent in four-year colleges and 38.4 percent in universities. Clearly, many women who, at the time of college entry, expressed an interest in dentistry as a career have in mind subprofessional rather than professional training.

Table III-20

Degree Plans, by Race and Sex, and by Type of Institution--1974 Aspiring Dentists

1974 Degree Plans	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Universities									
Bachelor's	4.1	4.0	4.1	53.0	.0	49.4	13.3	1.7	13.1
Master's	3.2	11.0	3.3	4.4	3.9	4.3	3.4	6.9	3.5
Ph.D. or Ed.D.	5.6	.0	5.5	.3	4.0	.5	4.6	2.3	4.5
Medical degree	85.0	85.0	85.0	35.1	83.7	38.4	75.6	84.3	75.8
Other	2.1	.0*	2.1	7.3	8.4	7.4	3.1	4.8	3.1
Four-Year Colleges									
Bachelor's	5.6	13.7	6.2	24.3	2.7	20.0	8.7	9.6	8.8
Master's	4.7	6.8	4.9	11.7	4.2	10.2	5.9	5.8	5.9
Ph.D. or Ed.D.	8.0	13.4	8.4	4.4	11.6	5.8	7.4	12.8	7.9
Medical degree	79.9	66.0	78.9	39.8	79.2	47.6	73.3	71.0	73.1
Other	1.8	.0	1.7	19.8	2.3	16.3	4.8	.9	4.3
Two-Year Colleges									
Bachelor's	4.2	60.6	5.1	27.7	20.7	27.5	13.0	37.3	13.5
Master's	7.0	.0	6.9	8.5	.0	8.7	7.6	.0	7.4
Ph.D. or Ed.D.	4.2	.0	4.2	3.4	.0	3.2	3.9	.0	3.8
Medical degree	82.8	39.4	82.1	9.2	.0	8.9	55.5	16.4	54.6
Other	1.7	.0	1.7	51.2	79.3	52.2	20.1	46.4	20.7

The sex difference in degree plans is also reflected in plans to transfer to another college before graduation (Table III-21). Only one in three women but over half the men in two-year colleges planned to transfer to another institution to receive their baccalaureate. Of course, these students may experience slight delays in completing their degrees since transfer tends to slow the process (Holmstrom and Bisconti, 1974).

Table III-21

Proportion Likely to Transfer to Another College,[a] by Race and Sex and by Institutional Type--1974 Aspiring Dentists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University	32.8	44.8	33.0	40.9	50.7	41.6	34.3	50.3	34.7
Four-year college	51.0	37.8	50.1	77.2	46.1	71.9	55.7	40.9	54.4
Two-year college	52.2	56.2	52.3	35.9	.0	34.6	45.3	24.0	44.7

[a] Proportion indicating that there was "some chance" or "a very good chance" that they would transfer to another college before graduating.

Career Choice

Asked to indicate their reasons for long-term career choice, most aspiring dentists indicated that altruistic factors, as well as practical and materialistic ones, were very influential (Table III-22). For instance, 71.7 percent of aspiring dentists indicated that the opportunity to be helpful to others was a very important consideration, followed by the ability to work with people (70.5 percent), and their intrinsic interest in the field (63.7 percent). Aspiring dentists were more likely than were freshmen-in-general to emphasize high earnings (60.6 percent versus 41.7 percent),

Table III-22

Reasons[a] for Career Choice, by Race and Sex--1974 Aspiring Dentists

	Men			Women			Total			National
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Norms
Job openings generally available	48.8	69.3	49.4	66.3	75.6	66.1	53.4	72.3	54.3	46.8
Rapid career advancement possible	39.5	52.9	39.9	40.1	50.5	40.9	39.7	51.8	40.2	34.8
High anticipated earnings	61.6	83.0	62.3	56.5	68.7	56.4	59.9	76.1	60.6	41.7
Well-respected or prestigious occupation	51.8	53.1	51.8	46.2	66.6	47.7	50.2	59.5	50.6	32.2
Great deal of independence	67.8	58.0	67.5	44.0	53.6	44.7	61.1	56.3	60.9	41.1
Chance for steady progress	51.6	55.0	51.7	46.6	66.3	48.1	50.2	60.7	50.7	48.7
Can make an important contribution to society	51.9	56.7	52.0	52.4	67.4	53.5	52.0	61.9	52.5	47.2
Can avoid pressure	24.6	16.3	24.3	16.2	32.3	17.4	22.2	24.2	22.3	17.0
Can work with ideas	23.4	37.4	23.8	26.7	47.8	26.4	23.8	42.5	24.6	44.1
Can be helpful to others	68.3	73.8	68.5	78.8	88.3	79.5	71.3	81.2	71.7	61.8
Able to work with people	65.1	74.5	65.3	82.9	86.1	83.2	70.1	80.4	70.5	69.3
Intrinsic interest in the field	61.4	72.2	61.7	67.5	82.8	68.6	63.1	77.5	63.7	67.4

[a] Reason indicated as "very important."

independence (60.9 percent versus 41.1 percent), and a chance at steady job progress (50.7 percent versus 48.7 percent). Blacks were more likely than were nonblacks to say that financial and instrumental considerations were important to their career choice, while women were more likely than were men to stress expressive or altruistic reasons.

The relation between parental income and the importance attached to various reasons for career choice was confounded by sex and racial/ethnic differences (Table III-23). Interestingly, students from high-income families tended to be more concerned about the high anticipated earnings than were those from lower-income families.

Table III-23

Reasons[a] for Career Choice, by Race, by Sex, and by Income Level--1974 Aspiring Dentists

	Men	Women	Nonblacks	Blacks
Job openings generally available:				
Less than $6,000	51.9	53.8	46.5	68.7
$6,000 - $12,499	52.9	64.9	55.2	78.8
$12,500 - $24,999	50.4	72.0	56.9	62.3
$25,000 and over	64.2	62.5	46.4	68.9
Rapid career advancement possible:				
Less than $6,000	48.0	43.0	48.4	34.1
$6,000 - $12,499	42.7	38.3	38.7	64.9
$12,500 - $24,999	37.7	42.8	38.4	56.3
$25,000 and over	40.0	43.3	40.6	58.1
High anticipated earnings:				
Less than $6,000	72.1	40.1	52.1	67.3
$6,000 - $12,499	59.2	50.2	54.2	81.2
$12,500 - $24,999	60.6	57.3	59.5	76.7
$25,000 and over	61.8	64.8	63.8	76.0
Well-respected or prestigious occupation:				
Less than $6,000	57.8	44.2	50.9	51.7
$6,000 - $12,499	52.7	50.5	50.5	71.6
$12,500 - $24,999	50.4	43.6	48.7	57.8
$25,000 and over	51.8	52.9	51.7	69.1
Great deal of independence:				
Less than $6,000	56.4	30.2	41.6	46.8
$6,000 - $12,499	67.4	45.8	60.4	58.5
$12,500 - $24,999	64.8	48.7	62.7	63.8
$25,000 and over	72.0	67.3	65.8	85.1
Chance for steady progress:				
Less than $6,000	64.3	44.6	55.2	58.4
$6,000 - $12,499	56.6	46.1	50.6	76.9
$12,500 - $24,999	50.3	51.8	50.4	52.8
$25,000 and over	49.3	48.7	49.0	70.4
Can make an important contribution to society:				
Less than $6,000	80.2	74.6	66.7	76.0
$6,000 - $12,499	59.2	56.2	57.6	66.6
$12,500 - $24,999	50.4	46.6	48.6	54.8
$25,000 and over	51.4	42.4	49.0	62.8
Can avoid pressure:				
Less than $6,000	21.6	14.7	12.8	46.1
$6,000 - $12,499	24.0	14.3	20.1	29.5
$12,500 - $24,999	24.5	13.2	22.2	10.8
$25,000 and over	28.7	24.3	26.2	18.3
Can work with ideas:				
Less than $6,000	37.7	40.3	37.8	47.5
$6,000 - $12,499	30.0	27.4	27.8	46.8
$12,500 - $24,999	19.2	25.8	20.3	35.8
$25,000 and over	25.6	25.0	25.0	50.7
Can be helpful to others:				
Less than $6,000	88.3	87.7	76.8	89.0
$6,000 - $12,499	79.4	86.0	79.6	87.5
$12,500 - $24,999	66.6	75.6	66.3	76.6
$25,000 and over	66.9	80.2	66.8	90.8
Able to work with people:				
Less than $6,000	79.5	87.7	61.7	92.1
$6,000 - $12,499	78.1	87.1	76.6	90.5
$12,500 - $24,999	65.0	81.1	68.8	78.9
$25,000 and over	61.3	73.8	64.1	72.0
Intrinsic interest in the field:				
Less than $6,000	54.5	80.5	70.2	61.1
$6,000 - $12,499	66.5	61.7	62.8	87.3
$12,500 - $24,999	60.5	76.3	63.6	68.0
$25,000 and over	60.6	66.3	61.2	77.5

[a] Reason indicated as "very important."

Summary

In summary, the characteristics of freshmen interested in dentistry as a lifelong career have changed relatively little since 1966; the typical or modal student interested in dentistry was still a young, white male from an affluent and relatively well-educated background. He had a very high regard for himself, particularly of his drive to achieve; he also was much more likely than was the average freshman to rate himself high on such attributes as academic, athletic, mathematical, mechanical, and leadership abilities and intellectual and social self-confidence.

Relative to other aspirants to health professional careers, the typical aspiring dentist gave high priority to the goals of being successful in his own business, earning a lot of money, and becoming an authority in his field. He was more likely than was the average freshman to be enrolled in a four-year college or university; and he expressed relatively little concern over his financial situation, relying heavily on his parents to support his college education.

Black aspiring dentists, especially men, were much more confident of their social skills, physical attractiveness and popularity with the opposite sex than were nonblack aspiring dentists. The life goals and values of women were more altruistic and less materialistic than those of men. The women among aspiring dentists, however, were much more likely to enroll in two-year colleges than were the men, and their degree and study field plans belied their freshman aspirations, suggesting that many of them will end up as dental hygienists or technicians rather than dentists.

Despite the growing number of blacks and women, most of the students attracted to dentistry as a profession still seem to be highly competitive and hard-driven persons, influenced by more materialistic and instrumental concerns than the average student. In fact, among aspiring dentists, the group that was most concerned with making money were those students whose families were in the highest income group.

CHAPTER IV - ASPIRING PHARMACISTS

HIGHLIGHTS

- In the fall of 1974, 15,845 first-time, full-time freshmen (.9 percent of the total entering class) named pharmacy as their career choice. This represents an increase of 66 percent over 1966 in the number of aspiring pharmacists; the increase was greatest among women (208.1 percent) and blacks (118.1 percent); the number of nonblack men increased only modestly (28.6 percent). Nonetheless, pharmacy as a career choice was still predominantly male (62.1 percent) and nonblack (93.8 percent).

- The typical aspiring pharmacist, in 1974 as in 1966, was an 18-year-old white man who differed markedly from the typical aspiring physician and dentist in that he had little confidence in either his intellectual or his social abilities. Though more likely than other nonblack men aspiring to health professions to emphasize having administrative responsibility over others, and more likely than the average male freshman to value making a theoretical contribution to science, being very well-off, and succeeding in his own business, he was otherwise rather unambitious, choosing a career in pharmacy primarily because of the availability of jobs. He came from a relatively low socioeconomic background, relied heavily on his parents, part-time work, and savings to finance his college education, but was not particularly apt to worry about his ability to pay for college. He was more likely than were other nonblack male aspiring health professionals to enroll in a two-year college and less likely to enroll in a university. His degree and study field plans were generally consistent with his career plans, suggesting that he will probably succeed in achieving his freshman goals.

- Blacks planning to become pharmacists came from very low socioeconomic backgrounds: Over one-third reported parental incomes of under $6,000 and expressed major concern about college finances, despite their heavy participation in federal grant and loan programs. They were at the same time more achievement-oriented and more social-minded than nonblacks, giving greater emphasis to becoming an authority in their field, obtaining recognition, helping others, and cleaning up the environment. They cited the chance to contribute to society as a very important factor in their career choice and also mentioned such practical considerations as job availability, steady progress, and rapid advancement. Except for the relatively small proportion who enrolled in two-year colleges, their degree and study field plans seemed congruent with their career goals.

- Black men saw themselves as physically attractive, popular with the opposite sex, and socially self-confident, but beyond that had a rather negative self-image, like their nonblack counterparts. Though they were little concerned with succeeding in their own business, they regarded developing a meaningful philosophy and writing original works as very important life goals.

  Black women had greater confidence in their academic ability than black men and, in addition, saw themselves as original and understanding of other people. They were distinctive in giving high priority to such social/political goals as influencing the political structure, participating in community action programs, influencing social values, and keeping up-to-date with political affairs.

- Nonblack women were the most outstanding subgroup of aspiring pharmacists, particularly in their self-image: They gave themselves high ratings on academic, mathematical, writing, and artistic ability; on drive to achieve; and on understanding of others. They were more likely than were men planning on a career in pharmacy to cite intrinsic interest, ability to work with people, and the chance to be helpful to others and to contribute to society as important reasons in their career choice. As was true with other aspiring pharmacists, however, one of the most commonly cited reasons was simply the availability of jobs. Relative to other subgroups, these women came from fairly affluent backgrounds and had well-educated parents. About one in ten said their fathers had advanced degrees, and 2.3 percent said that their fathers were physicians. Most expected to rely on their parents for support in college, though a sizable proportion also received local or private scholarships. They were relatively unlikely to express concern over their ability to pay for college. An unusually large proportion attended universities; one in four enrolled in a two-year college, and only two-thirds of these expected to transfer to another institution. But, except for this group, the degree and study field plans of nonblack women interested in pharmacy were consistent with their career plans.

General Characteristics

At the time they entered college in the fall of 1974, 15,845 students (or .9 percent of all first-time, full-time freshmen) reported that they planned a career in pharmacy. Table IV-1 shows the numbers of these aspiring pharmacists, by sex and race/ethnicity, for the 1966 and 1972 as well as 1974 freshman class. In the eight-year period covered by this study, the freshman career choice of pharmacy registered a 66 percent increase in absolute numbers.

Table IV-1

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Pharmacists, by Race and Sex

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	9,415	428	9,843	5,441	561	6,002	14,856	989	15,845
1972	8,919	447	9,366	3,457	345	3,802	12,375	793	13,168
1966	7,322	278*	7,600	1,773	175*	1,948	9,095	453*	9,548

*Actual numbers were too small for further analyses.

This chapter describes the 1974 aspiring pharmacists, and where appropriate, compares them with their counterparts in the two earlier freshman classes, with all 1974 entering freshmen (Astin et al., 1974), and with other groups of 1974 aspiring health professionals.

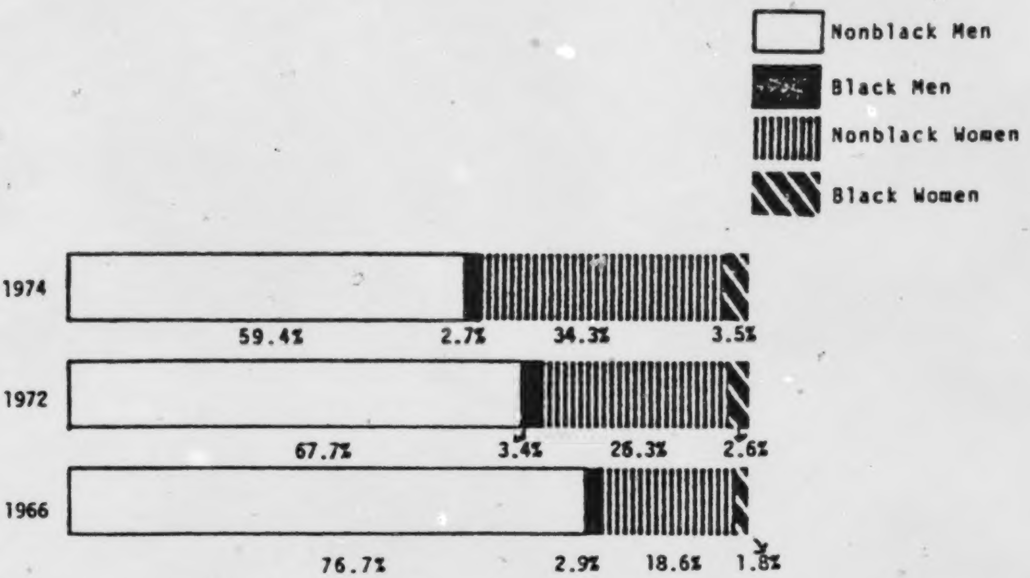
The following sections profile aspiring pharmacists in terms of their demographic and background characteristics, college finances, self-ratings, life goals, and identity groups.

Sex and Race/Ethnicity

As with medicine and dentistry, pharmacy has become increasingly popular among women and blacks in recent years (Figure IV-1). The proportion of women among students naming pharmacy as their career choice jumped from 20.4 percent in 1966 to 37.8 percent in 1974; thus, though still below their proportion in the total 1974 entering freshman class (47.8 percent), women were better represented among aspiring pharmacists than among any other group of aspiring health professionals except veterinarians. The proportion of blacks jumped from 4.7 percent in 1966 to 6.2 percent in 1974. The increases in absolute numbers over the eight-year period were 208.1 percent for women and 118.3 percent for

FIGURE IV-1

Race and Sex Distribution of 1966, 1972, and 1974 Freshmen Aspiring to Become Pharmacists



blacks, as against 29.5 percent for men and 63.3 percent for nonblacks. Nonetheless, in 1974, the group of aspiring pharmacists was still predominantly male (62.1 percent) and nonblack (93.8 percent).

Among black aspiring pharmacists, women outnumbered men in 1974, constituting 56.7 percent of this subgroup, compared with only 38.6 percent in 1966[1] and 43.5 percent in 1972. Indeed, the absolute numbers of black men planning to become pharmacists declined by 4.3 percent between 1972 and 1974, though the increase over the entire eight-year period was 54 percent. The corresponding increase among black women was 220.6 percent, the largest for any of the four analytic subgroups.

Slightly over one in twenty (5.5 percent) of the 1974 nonblack aspiring pharmacists belonged to a racial/ethnic minority (Table IV-2). Of this group, 32 percent were Oriental, 26.9

Table IV-2

Number and Distribution of Nonblack Minority-Group Members Aspiring to Become Pharmacists--1974, 1972, and 1966 Freshman Classes

	1974		1972		1966	
	N	%	N	%	N	%
American Indian	61	7.4	104	11.4	19	4.2
Oriental	263	32.0	370	40.7	174	38.2
Mexican-American	221	26.9	137	15.1	--	--
Puerto Rican	64	7.8	34	3.7	--	--
Other	212	25.8	264	29.0	263	57.7
Total	821	100.0	909	100.0	456	100.0

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[1] Because of the small numbers involved, the 1966 black aspiring pharmacists will not be discussed separately from the total group.

percent were Mexican-American, 25.8 percent were "other," 7.8 percent were Puerto Rican, and 7.4 percent were American Indian. The absolute numbers of Orientals, American Indians, and "other" minority students reached a peak in 1972 and then declined in 1974; the absolute numbers of Puerto Ricans increased by 88.2 percent between 1972 and 1974; for Mexican-Americans, the increase in that same period was 61.3 percent. Over the 1966-74 period, the increase was highest for American Indians (221.1 percent), followed by Orientals (51.1 percent).[2] The corresponding increase for whites was 64.4 percent. Even though minorities were better represented among aspiring pharmacists in 1974 than in 1966, their proportions were still generally smaller than their proportions among the total 1974 freshman class, except in the case of Orientals.

Age and Marital/Dating Status

Four out of five aspiring pharmacists entered college at age 18; 96 percent had graduated from high school the previous spring (Tables IV-3 and IV-4). Black women represented the most notable

Table IV-3

Age Distribution, by Race and Sex--1974 Aspiring Pharmacists

Age, as of 31 December, 1974	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
16 or younger	.0	.0	.0	.0	1.3	.1	.0	.7	.1
17	2.3	1.1	2.3	5.4	9.1	5.7	3.4	5.6	3.6
18	80.2	79.9	80.2	82.7	69.3	81.5	81.1	74.2	80.7
19	14.7	10.9	14.6	11.5	9.9	11.3	13.5	10.3	13.3
20	1.1	2.2	1.2	.2	1.8	.3	.8	2.0	.8
21 or older	1.6	5.9	1.8	.3	8.0	1.0	1.1	7.1	1.5

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[2] No information is available for Mexican-Americans and Puerto Ricans in 1966.

Table IV-4

High School Graduation Year/Status, by Race and Sex--1974 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Graduated 1974	95.1	93.8	95.1	98.3	89.0	97.5	96.3	91.1	96.0
Graduated 1973	2.3	2.5	2.3	1.2	5.5	1.6	1.9	4.2	2.0
Graduated 1972	.8	.0	.8	.0	1.9	.2	.5	1.0	.5
Graduated 1971 or earlier	1.6	2.6	1.6	.3	.0	.2	1.1	1.1	1.1
Passed G.E.D. test	.2	1.2	.2	.0	3.7	.3	.1	2.6	.3
Never completed high school	.1	.0	.1	.2	.0	.2	.1	.0	.1

deviation from this norm: About one in ten was 17 or younger at the time of college entry, and another one in ten was 20 or older; 7.4 percent had delayed college entry by a year or two, and 3.7 percent (compared with only .3 percent of all aspiring pharmacists) had gained entry to college by passing the General Educational Development (GED) test. Black men were more likely than were nonblack men to be age 20 or older at the time of college entry (8.1 percent versus 2.7 percent).

Very few aspiring pharmacists were either married or engaged at college entry (Table IV-5). Most (43.1 percent) reported that they were dating several people, the proportion being highest among black men (65.5 percent), and lowest among black women (29.4

Table IV-5

Marital/Dating Status, by Race and Sex--1974 Aspiring Pharmacists

Marital/Dating Status	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Presently married	1.4	2.2	1.4	.8	.0	.7	1.2	1.0	1.1
Presently engaged	1.3	2.4	1.4	1.2	4.7	1.5	1.3	3.7	1.4
Have been seeing one person exclusively	34.2	17.9	33.5	37.7	50.2	38.8	35.5	35.9	35.5
Have been seeing several persons, but no one exclusively	43.2	65.5	44.1	42.6	29.4	41.4	43.0	45.4	43.1
Have not been dating in recent months	19.9	12.1	19.6	17.8	15.7	17.7	19.2	14.1	18.9

percent), who were more likely to report that they were dating one person exclusively (50.2 percent as compared with 35.5 percent of all aspiring pharmacists).

Socioeconomic Background

Aspiring pharmacists tended to come from lower socioeconomic backgrounds than did either aspiring physicians or dentists. Indeed, their reported median parental income in 1974 was $14,099, which is $289 less than the reported median parental income of freshmen-in-general (Table IV-6). Substantially fewer were in the highest income group of $25,000 or above (13.4 percent as compared with 29 percent of aspiring physicians and 24 percent of aspiring dentists).

Table IV-6

Parental Income (1973), by Race and Sex--1974 Aspiring Pharmacists

Parental Income (1973)	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Less than $3,000	2.4	13.0	2.8	1.1	13.1	2.2	1.9	13.0	2.6
$3,000 - $3,999	1.5	9.8	1.9	3.5	10.6	4.2	2.2	10.2	2.7
$4,000 - $5,999	4.7	8.1	4.8	1.6	12.2	2.6	3.6	10.4	4.0
$6,000 - $7,999	5.3	2.1	5.2	3.8	16.7	5.0	4.8	10.2	5.1
$8,000 - $9,999	8.4	10.7	8.5	6.6	11.0	7.0	7.8	10.8	8.0
$10,000 - $12,499	17.7	30.3	18.3	14.7	13.4	14.6	16.7	20.9	16.9
$12,500 - $14,999	18.6	11.0	18.3	14.7	8.9	14.0	17.2	8.7	16.7
$15,000 - $19,999	20.2	6.4	19.6	20.6	6.9	19.3	20.3	6.7	19.5
$20,000 - $24,999	9.9	2.1	9.5	15.8	4.7	14.0	11.7	3.6	11.2
$25,000 - $29,999	5.1	6.5	5.2	6.9	.4	6.3	5.8	3.1	5.6
$30,000 - $34,999	1.7	.0	1.7	4.3	2.3	4.1	2.6	1.3	2.6
$35,000 - $39,999	1.5	.0	1.4	2.5	1.9	2.4	1.9	1.1	1.8
$40,000 - $49,999	1.3	.0	1.3	1.1	.0	1.0	1.3	.0	1.2
$50,000 or more	1.7	.0	1.6	3.7	.0	3.3	2.4	.0	2.2
MEDIAN	$13,845	$9,704	$13,660	$15,975	$7,705	$15,100	$14,399	$9,159	$14,099

Of the various subgroups, nonblack women came from the most affluent backgrounds, reporting a median parental income of $15,975; black women reported the lowest: $7,705.

When the median incomes for the 1966, 1972, and 1974 groups of aspiring pharmacists are converted into 1966 constant dollars as deflated by the Consumer Price Index, one finds that the median parental income of nonblack men increased by $764, and that of nonblack women by $261 (Table IV-7). In the two years between 1972 and 1974, the median parental income of black men increased by a substantial $1,979, whereas that of black women declined by $799. In 1966, the number of black aspiring pharmacists was too small to provide reliable trend information.

Table IV-7

Median Parental Income in Constant Dollars,[a] by Race and Sex--1974, 1972, and 1966 Aspiring Pharmacists

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	$9,467	$7,193	$9,331	$10,912	$5,263	$10,314	$9,835	$6,256	$9,630
1972	$9,481	$5,214	$9,377	$10,232	$6,062	$9,768	$9,644	$5,606	$9,476
1966	$8,703	—	$8,888	$10,651	—	$10,528	$8,944	—	$8,963

[a] Median parental income figures are in fiscal 1966 constant dollars as deflated by the Consumer Price Index.

In 1974, 29.1 percent of the aspiring pharmacists reported that their fathers had at least a college education, compared with 47.8 percent of the aspiring physicians, 38.9 percent of the aspiring dentists, and 31.5 percent of the total freshman class (Table IV-8). About one in ten aspiring pharmacists said their fathers had a graduate degree. Nonblack women were most likely to have college-educated fathers (36.4 percent), black women the least likely (17 percent), closely followed by black men (17.6 percent).

Again, the mothers tended to be less well-educated than the fathers: 18.4 percent of the aspiring pharmacists reported that their mothers had at least a college education, compared with 30.2 percent of the aspiring physicians, 21 percent of the aspir-

Table IV-8

Father's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Pharmacists

Father's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	7.2	18.3	7.7	4.8	10.6	5.3	6.3	13.9	6.8
Some high school	14.2	15.9	14.3	7.6	29.1	9.5	11.8	23.4	12.5
High school graduate	35.1	33.9	35.1	29.1	26.8	28.9	32.9	29.8	32.7
Postsecondary school other than college	3.6	2.7	3.7	4.4	2.5	4.3	4.0	2.6	3.9
Some college	13.7	11.7	12.6	17.7	14.2	17.4	15.2	13.1	15.0
College degree	15.1	11.3	14.9	22.8	12.5	21.9	17.9	12.0	17.6
Some graduate school	2.0	.0	1.9	2.2	2.4	2.2	2.0	1.4	2.0
Graduate degree	9.0	6.3	8.9	11.4	2.1	10.5	9.9	3.9	9.5
1972:									
Grammar school or less	6.3	12.5	6.6	3.4	33.2	5.9	5.5	21.1	6.4
Some high school	19.4	31.7	20.0	13.4	10.0	13.2	17.7	23.0	18.0
High school graduate	33.3	30.0	30.5	30.1	26.4	29.7	33.8	33.3	33.0
Some college	15.9	6.6	15.5	20.2	23.3	20.6	17.1	13.8	16.9
College degree	14.5	4.3	14.0	18.9	2.3	17.5	16.7	3.4	15.6
Some graduate school	1.7	1.2	1.6	2.8	.0	2.5	2.0	.7	1.9
Graduate degree	6.9	4.9	6.8	11.3	5.1	10.7	8.1	5.8	8.0
1966:									
Grammar school or less	12.8	—	13.0	5.8	—	6.2	11.4	—	11.6
Some high school	19.9	—	20.3	8.8	—	10.5	17.7	—	18.3
High school graduate	31.6	—	31.5	30.6	—	28.6	31.3	—	30.9
Some college	18.9	—	18.8	19.2	—	19.4	19.0	—	18.9
College degree	11.0	—	10.6	23.9	—	24.8	13.5	—	13.5
Postgraduate degree	5.8	—	5.6	12.4	—	11.3	7.1	—	6.8

ing dentists, and 20.2 percent of freshmen-in-general (Table IV-9). Nonblack women were most likely to have college-educated mothers

Table IV-9

Mother's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Pharmacists

Mother's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	3.6	15.9	4.1	2.3	1.5	2.2	3.1	7.7	3.4
Some high school	10.3	7.6	10.2	5.6	25.2	7.4	8.6	17.6	9.1
High school graduate	51.0	26.4	50.0	42.8	31.2	41.8	48.0	29.1	46.9
Postsecondary school other than college	7.5	15.9	7.8	9.7	4.2	9.2	8.3	9.2	8.3
Some college	11.6	17.2	11.9	16.7	22.7	17.3	13.5	20.3	13.9
College degree	11.5	13.6	11.6	16.9	9.4	16.2	13.5	11.2	13.4
Some graduate school	1.9	.0	1.8	1.4	2.3	1.5	1.7	1.3	1.7
Graduate degree	2.5	3.5	2.6	4.5	3.6	4.4	3.3	3.6	3.3
1972:									
Grammar school or less	4.1	16.7	4.7	3.7	10.4	5.0	4.0	17.9	4.8
Some high school	17.0	29.8	17.8	12.0	17.7	12.5	15.6	24.6	16.1
High school graduate	50.8	29.2	48.8	43.0	44.1	43.1	48.6	35.6	47.8
Some college	12.4	14.0	12.5	18.0	2.7	16.7	14.0	9.2	13.7
College degree	10.2	8.2	10.1	17.8	6.4	16.8	12.3	7.4	12.1
Some graduate school	2.4	2.0	2.4	1.8	2.7	1.9	2.2	2.3	2.2
Graduate degree	3.1	.0	3.0	3.6	7.1	3.9	3.3	3.0	3.2
1966:									
Grammar school or less	6.8	—	6.9	4.6	—	5.0	6.4	—	6.5
Some high school	17.4	—	17.7	7.7	—	9.5	15.9	—	16.0
High school graduate	46.3	—	46.0	42.6	—	41.3	45.6	—	45.0
Some college	18.8	—	19.0	25.8	—	23.6	20.0	—	20.0
College degree	10.1	—	9.7	17.7	—	17.3	11.6	—	11.3
Postgraduate degree	.7	—	.7	2.3	—	3.0	1.0	—	1.2

(22.8 percent), and black women least likely (15.3 percent), followed by nonblack men (15.9 percent). In the eight years covered by the study, there was a slight but steady upgrading in the educational level of the parents for all subgroups of aspiring pharmacists.

About one in twenty of the total group of aspiring pharmacists said their fathers were pharmacists, 2 percent that their fathers were in another health profession, and 13.7 percent that their fathers worked in a nonhealth profession (e.g., engineering, law) (Table IV-10). The proportion who had fathers in high-status occupations was smaller than the proportions for aspiring physicians and dentists. One-fourth of the aspiring pharmacists reported that their fathers were in business; the skilled trades

Table IV-10

Father's Occupation, by Race and Sex--1970 Aspiring Pharmacists

Father's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.9	.0	.9	2.3	.0	2.1	1.4	.0	1.3
Dentist	.5	.0	.5	.5	.0	.5	.5	.0	.5
Pharmacist	5.4	.0	5.2	5.5	1.7	5.2	5.5	1.0	5.2
Optometrist	.0	.0	.0	.2	.0	.1	.1	.0	.1
Veterinarian	.0	.0	.0	.1	1.4	.2	.0	.8	.1
Nurse	.0	.0	.0	.0	.0	.0	.0	.0	.0
Home economist/dietician	.0	.0	.0	.0	.0	.0	.0	.0	.0
Health technician or technologist	.1	1.9	.2	.1	.0	.1	.1	.8	.1
Therapist	.0	.0	.0	.8	.0	.7	.3	.0	.3
Artist	.5	.0	.5	.1	.0	.1	.4	.0	.4
Business manager	23.0	5.9	22.4	28.3	10.7	27.4	24.9	13.4	24.3
Clergy	1.0	.0	1.0	1.0	.0	.9	1.0	.0	1.0
Educator (college)	.4	.0	.4	.7	2.0	.8	.5	1.2	.5
Educator (secondary)	1.9	.0	1.8	2.4	4.2	2.5	2.1	2.5	2.1
Educator (elementary)	.5	.0	.5	.0	.0	.0	.3	.0	.3
Education (special)	.8	2.2	.8	.1	.0	.1	.5	.9	.6
Engineer	4.8	.0	4.6	6.4	1.2	5.9	5.4	.7	5.1
Farmer/forester	5.6	.0	5.3	3.6	.6	3.3	4.8	.3	4.5
Lawyer	.2	.0	.2	1.2	.5	1.1	.6	.3	.5
Research scientist	.3	.0	.3	1.2	.0	1.1	.6	.0	.6
Skilled worker	20.7	15.9	20.4	16.1	14.9	16.0	21.6	15.3	21.2
Unskilled worker	9.9	31.7	10.7	6.9	27.1	8.7	8.8	29.0	9.9
Other professional[a]	2.3	4.9	2.4	4.2	3.2	4.1	3.0	3.9	3.0
Other nonprofessional[b]	14.5	31.7	15.1	16.9	15.2	16.8	15.4	22.1	15.8
Unemployed	2.7	5.9	2.8	1.7	9.4	2.4	2.4	8.0	2.7

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

claimed one in five, and 9.9 percent worked in unskilled trades. Blacks were less likely than were nonblacks to say their fathers worked in a high-level occupation. Women were more likely than men to report that their fathers were physicians (2.1 percent versus .9 percent), businessmen (27.4 percent versus 22.4 percent), or professionals in other than health fields (16.5 percent versus 12 percent), though this sex difference is accounted for almost entirely by nonblack women. Men were more likely to have fathers who were skilled laborers (24.4 percent versus 16 percent).

The proportion of aspiring pharmacists who reported that their mothers worked in a health field was 8.8 percent, about the same as that for aspiring physicians (9.1 percent) and larger than that for aspiring dentists (5.7 percent) (Table IV-11). Black women were more likely than were the other subgroups to have mothers who

Table IV-11

Mother's Occupation, by Race and Sex--1974 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dentist	.0	.0	.0	.0	.0	.0	.0	.0	.0
Pharmacist	.8	.0	.8	.9	.0	.8	.8	.0	.8
Optometrist	.0	.0	.0	.6	.0	.6	.3	.0	.3
Veterinarian	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nurse	6.6	13.5	6.9	5.1	14.0	5.9	6.1	13.8	6.5
Home economist/dietician	.4	.0	.3	.4	2.6	.6	.4	1.5	.4
Health technician or technologist	.1	.0	.3	.1	.0	.1	.2	.0	.2
Therapist	.0	.0	.0	.4	.4	.4	.2	.3	.2
Artist	.1	.0	.1	.2	.0	.1	.1	.0	.1
Business manager	10.9	3.1	10.6	7.6	8.3	7.6	9.7	6.2	9.5
Clergy	.0	.0	.0	.0	.0	.0	.0	.0	.0
Educator (college)	.2	.0	.2	.0	1.0	.1	.1	.6	.2
Educator (secondary)	1.6	.9	1.5	2.0	1.9	2.0	1.7	1.5	1.7
Educator (elementary)	3.3	11.4	3.6	5.4	4.7	5.3	4.1	7.4	4.3
Education (special)	1.5	1.7	1.6	.9	2.9	1.1	1.3	2.4	1.4
Engineer	.0	.0	.0	.0	.0	.0	.0	.0	.0
Farmer/forester	.2	.0	.2	.2	.0	.2	.2	.0	.2
Lawyer	.0	.0	.0	.2	.0	.2	.1	.0	.1
Research scientist	.0	.0	.0	.2	.0	.2	.1	.0	.1
Skilled worker	1.4	13.3	1.9	1.6	.0	1.4	1.4	5.4	1.7
Unskilled worker	2.7	3.3	2.7	3.5	5.0	3.6	3.0	4.3	3.1
Other professional[a]	2.9	5.5	3.0	2.3	2.8	2.3	[illegible]	3.9	[illegible]
Other nonprofessional[b]	58.2	29.4	[illegible]	61.7	[illegible]	60.4	60.1	40.8	58.9
Unemployed	7.4	18.2	7.9	7.0	8.3	7.1	7.2	14.4	[illegible]

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker

were nurses. About one in ten of all aspiring pharmacists said their mothers were in business, 7.6 percent that they were in education, and 3 percent that they were in other nonhealth professions. By far the largest proportion placed their mothers into the "other nonprofessional" category, which included housewives.

In summary, aspiring pharmacists tended to come from lower socioeconomic backgrounds than did aspiring physicians and dentists. Not only were their median parental incomes much smaller but their parents were less likely to be college graduates. The most notable exception to this generalization occurred among nonblack female aspiring pharmacists, who came from relatively affluent and well-educated backgrounds, and who were unusually likely to have physician fathers.

College Finances

Since recent court decisions have ruled that parents are no longer required to contribute toward the college education of their children who have reached the age of majority (18 years, in most states), many entering freshmen are now claiming financial independence, thus becoming eligible for federal student aid programs for which they might not otherwise qualify. In 1974, 11.1 percent of the aspiring pharmacists claimed financial independence, a proportion almost identical with that for aspiring physicians (11 percent) and smaller than that for aspiring dentists (15.6 percent) and freshmen-in-general (18.2 percent) (Table IV-12). Men were more likely to claim financial indepen-

Table IV-12

Financial Independence from Parents, by Race and Sex--1974 Aspiring Pharmacists

	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Financial independence THIS year:									
No	87.5	76.8	87.0	92.6	86.8	92.1	89.4	82.4	88.9
Yes	12.5	23.2	13.0	7.4	13.2	7.9	10.6	17.6	11.1
Financial independence LAST year:									
No	92.4	84.6	92.1	93.0	92.4	92.9	92.6	89.0	92.4
Yes	7.6	15.4	7.9	7.0	7.6	7.1	7.4	11.0	7.6

dence than were women (13 percent versus 7.9 percent) and blacks than nonblacks (17.6 percent versus 10.6 percent). These findings parallel those presented for aspiring physicians and dentists.

The majority of students, then, must rely to some extent on their parents for support. And when one looks at the various sources of finance for the first year of college, and the median amounts expected, this indeed proves to be the case (Table IV-13). Overall, 78 percent of the aspiring pharmacists expected to receive, on the average, $955 of support from their parents or families, a proportion that is close to the national norms figure of 80 percent. Aspiring pharmacists expected to receive $635 less than was expected by aspiring physicians and $78 less than was expected by aspiring dentists. Moreover, among aspiring pharmacists, only 57.8 percent of the blacks, compared with 79.3 percent of the nonblacks, received parental support, and in smaller amounts ($678 versus $980). The most likely group to be supported by parents was nonblack women, with 87.1 percent receiving an average

Table IV-13

Anticipated Sources and Amounts of Financial Support for First Year of College, by Race and Sex--1974 Aspiring Pharmacists

		Men			Women			Total		
		Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Parental, family aid or gifts	%	74.8	63.7	74.3	87.1	69.3	84.0	79.3	57.8	78.0
	(Medn.)	$882	$673	$864	$1,213	$680	$1,168	$980	$678	$955
Basic Educational Opportunity Grants	%	18.3	49.5	19.6	14.1	56.1	18.0	16.7	53.3	19.0
	(Medn.)	$4[illegible]2	$845	$474	$420	$760	$490	$428	$803	$479
Supplemental Educational Opportunity Grants	%	2.4	19.2	3.1	2.8	29.9	5.3	2.5	25.3	3.9
	(Medn.)	$428	$520	$448	$372	$577	$459	$403	$562	$453
College Work Study grant	%	5.9	40.7	7.4	6.2	39.9	9.3	6.0	40.3	8.2
	(Medn.)	$401	$586	$439	$457	$595	$512	$421	$592	$467
State scholarship or grant	%	19.5	19.2	19.5	20.7	18.0	20.5	19.9	18.4	19.8
	(Medn.)	$583	$741	$594	$588	$731	$606	$585	$734	$598
Local or private scholarship or grant	%	15.6	17.3	15.7	22.2	16.6	21.6	18.0	16.8	17.9
	(Medn.)	$369	$747	$381	$474	$668	$485	$410	$701	$422
Federal Guaranteed Student Loan	%	11.2	12.4	11.3	7.8	7.1	7.7	10.0	9.4	9.9
	(Medn.)	$1,227	$1,516	$1,242	$1,175	$704	$1,101	$1,211	$1,042	$1,203
National Direct Student Loan	%	5.1	11.0	5.3	6.3	28.2	8.3	5.5	20.9	6.5
	(Medn.)	$493	$536	$498	$657	$487	$601	$565	$499	$551
Other loan	%	7.2	8.9	7.3	5.8	9.3	6.1	6.7	9.2	6.8
	(Medn.)	$559	$1,590	$618	$946	$882	$888	$717	$1,014	$730
Full-time work	%	8.7	5.6	8.6	3.9	4.8	4.0	7.0	5.1	6.8
	(Medn.)	$731	$428	$720	$403	$337	$400	$667	$367	$650
Part-time or summer work	%	62.4	45.6	61.7	55.9	23.2	52.8	60.0	32.9	58.3
	(Medn.)	$416	$329	$412	$341	$285	$339	$387	$309	$384
Savings	%	49.3	31.5	48.5	45.5	17.6	42.9	47.9	23.7	46.4
	(Medn.)	$405	$303	$402	$347	$363	$348	$383	$326	$381
Spouse	%	1.1	4.0	1.2	.9	.0	.8	1.0	1.7	1.0
	(Medn.)	$388	$250	$359	$888	--	$879	$581	$250	$484
Your G.I. benefits	%	.3	.0	.3	1.0	.0	.9	.5	.0	.5
	(Medn.)	$1,799	--	$1,799	$339	--	$339	$469	--	$469
Your parent's G.I. benefits	%	1.4	.5	1.4	1.7	.0	1.5	1.5	.0+	1.4
	(Medn.)	$470	$250	$461	$356	--	$356	$413	$250	$411
Social security dependent's benefits	%	4.8	16.1	5.3	5.4	4.5	5.3	5.0	9.5	5.3
	(Medn.)	$595	$250	$489	$828	$250	$749	$674	$250	$572
Other	%	3.9	5.6	4.0	2.2	2.7	2.2	3.3	3.8	3.3
	(Medn.)	$332	$250	$323	$750	$1,500	$870	$377	$395	$378

amount of $1,213. Considering parental support as a proportion of median parental income, one finds a range from 6.4 percent for nonblack men to 8.8 percent for black women.

As was the case with aspiring physicians and dentists, blacks were the principal recipients of BEOG funds (53.3 percent, averaging $803, versus 16.7 percent, averaging $428, for nonblacks); black men received larger grants ($845) than did black women ($760), despite the lower median parental incomes of the latter. Blacks were also more likely than nonblacks to participate in the College Work-Study program (40.3 percent versus 6 percent), and in the SEOG program (25.3 percent versus 2.5 percent). Overall, however, fewer aspiring pharmacists participated in the SEOG program than in the College Work-Study program (3.9 percent versus 8.2 percent).

About one in five aspiring pharmacists received state scholarships or grants in amounts ranging from a median of $741 for black men to $583 for nonblack men. Local or private scholarships and grants went to 17.9 percent of the aspiring pharmacists, with nonblack women being the most likely (22.2 percent) and nonblack men the least likely (15.6 percent) to receive such awards; the amounts ranged from $747 for black men to $369 for nonblack men. It would seem, then, that the three federal student aid programs, state scholarship or grant programs, and (to a lesser extent) local and private programs compensated to some degree for the lower socioeconomic status of blacks, except that black women were somewhat slighted with respect to amounts received.

Aspiring pharmacists were somewhat more likely to borrow from the Federally Guaranteed Student Loan program or from "other" loan sources than were aspiring physicians and dentists. For instance, one in ten took a federally guaranteed loan, and in the formidable amount of $1,203; indeed, the median amount for black men was $1,516. In addition, 28.2 percent of the black women participated in the NDSL program, though the median amount of the loan they took was much smaller ($487). Nonetheless, one wonders how long these students can remain in college if they must borrow so heavily.

Overall, the second and third most important sources of finance for the freshman year (in terms of proportions) were part-time or summer work and savings. Here, a racial/ethnic difference appeared, with 60 percent of the nonblacks but only 32.9 percent of the blacks citing employment as a source, and 47.9 percent of the nonblacks but only 23.7 percent of the blacks citing savings. Relatively few aspiring pharmacists expected to help support themselves by working full-time, and here a sex difference was clear: 8.6 percent of the men versus 4 percent of the women.

Other sources of finance--such as support from spouse or G.I. benefits--were mentioned infrequently, except that 16.1 percent of the black men expected to draw on social security dependent's benefits. In short, most aspiring pharmacists--especially nonblacks--expected to rely on themselves (earnings from employment, savings) or on their parents for support. With respect to various scholarships and grants, black women--the most economically disadvantaged of the four subgroups of aspiring pharmacists--seemed to be shortchanged with respect to the median amounts of awards received.

It is not surprising, then that three in ten of these women--along with an equal proportion of black men--expressed major concern over their ability to pay for a college education; only 14.6 percent of the nonblacks expressed such concern (Table IV-14). These proportions are very similar to those for aspiring physicians and dentists and represent an increase from the 1966 level but a slight decline from the 1972 level.

Table IV-14

Concern Over Financing College Education, by Race and Sex--1974, 1972, and 1966 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
No concern	34.6	20.9	34.0	32.4	23.0	31.6	33.8	22.1	33.1
Some concern	50.9	48.8	50.8	52.9	47.1	52.4	51.6	47.8	51.4
Major concern	14.5	30.3	15.2	14.7	29.9	16.1	14.6	30.1	15.5
1972:									
No concern	26.0	21.9	25.8	31.3	14.4	29.8	27.4	18.6	26.9
Some concern	57.7	45.1	57.1	49.7	48.7	49.6	55.5	46.6	54.9
Major concern	16.4	33.1	17.2	19.0	37.0	20.7	17.1	34.8	18.2
1966:									
No concern	25.9	--	25.3	33.5	—	32.1	27.4	—	26.7
Some concern	64.5	—	64.4	59.5	—	59.8	63.5	--	63.4
Major concern	9.6	—	10.3	7.0	—	8.2	9.1	—	9.9

Concern over ability to finance a college education was related to parental income, with those in the lowest income group (under $6,000) more likely to express major concern than those in the highest ($25,000 and over) (Figures IV-2 and IV-3). In addition, over one-third of the black men and three in ten of the black women in the $12,500-$24,999 range expressed major concern. Students in this income category would not be eligible for most federal student aid programs.

FIGURE IV-2

Proportion Reporting Major Concern Over Financing College Education, by Sex, by Race, and by Parental Income--1974 Aspiring Pharmacists

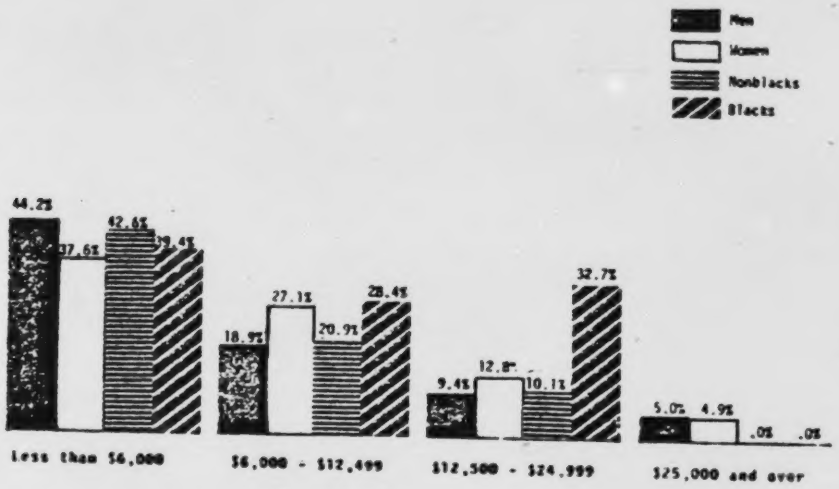
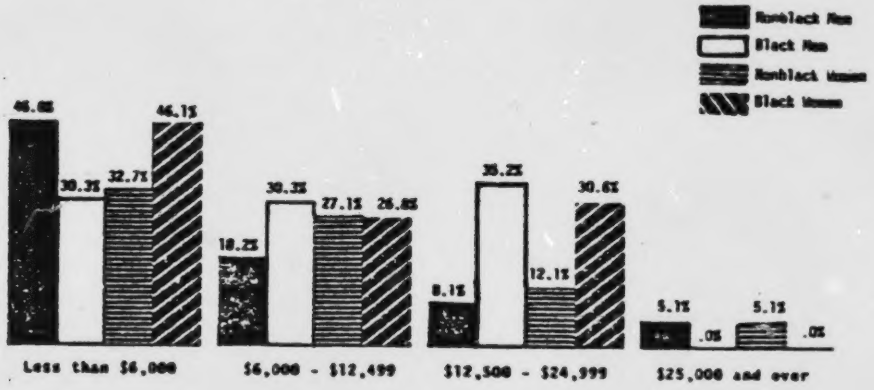


FIGURE IV-3

Proportion Reporting Major Concern Over Financing College Education, by Race and Sex, and by Parental Income--1974 Aspiring Pharmacists



Self-Ratings

Judging from their overall self-ratings on a variety of traits, the image that the total group of 1974 aspiring pharmacists had of themselves was generally a favorable one, though not nearly to the same extent as was true for aspiring physicians and dentists (Table IV-15). Thus, larger proportions of aspiring pharmacists than of freshmen-in-general tended to rate themselves as "above average" or "in the top 10 percent" on the following: drive to achieve (70 percent versus 59.9 percent), academic ability (66.6 percent versus 53 percent), mathematical ability (52.2 percent versus 33.4 percent), intellectual self-confidence (48.1 percent versus 40.7 percent). On the other hand, smaller proportions of

Table IV-15

Self-Ratings,[a] by Race and Sex--1974 Aspiring Pharmacists and All Freshmen

Trait	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Academic ability	63.2	32.4	61.8	76.5	54.2	74.4	68.1	44.9	66.6	53.0
Athletic ability	45.0	38.4	44.7	28.2	14.0	26.8	38.9	24.5	37.9	38.5
Artistic ability	11.3	9.2	11.2	17.6	7.3	16.6	13.6	8.2	13.3	19.5
Cheerfulness	42.7	47.2	42.8	55.1	56.1	55.2	47.2	52.2	47.5	52.2
Defensiveness	25.2	20.7	25.0	28.0	34.9	28.3	26.2	28.7	26.2	27.1
Drive to achieve	65.4	65.9	65.4	77.9	72.9	77.4	70.0	70.0	70.0	59.9
Leadership ability	42.4	35.8	42.1	43.7	39.1	43.2	42.9	37.7	42.6	41.3
Mathematical ability	49.8	27.5	48.8	60.0	35.5	57.7	53.5	32.0	52.2	33.4
Mechanical ability	33.9	10.6	32.9	14.5	6.6	13.8	26.8	8.3	25.7	23.8
Originality	30.7	22.3	30.3	33.4	42.8	34.3	31.6	34.0	31.8	37.4
Physical attractiveness	23.6	35.4	24.1	27.2	22.3	26.7	25.0	27.8	25.1	26.1
Political conservatism	11.6	3.2	11.2	11.6	4.7	10.9	11.6	4.0	11.1	10.5
Political liberalism	17.8	35.0	18.5	17.1	21.4	17.5	17.5	27.3	18.2	20.1
Popularity	28.4	29.0	28.5	30.5	27.7	30.2	29.1	28.3	29.1	30.2
Popularity with opposite sex	28.4	35.1	28.7	29.3	23.1	28.7	28.8	28.3	28.7	29.4
Public speaking ability	19.1	16.3	18.9	21.1	23.9	21.4	19.8	20.8	19.9	20.7
Intellectual self-confidence	48.9	45.2	48.7	47.5	44.5	47.2	48.4	44.8	48.1	40.7
Social self-confidence	34.7	51.1	35.4	31.5	37.5	32.0	33.5	43.5	34.1	33.9
Sensitivity to criticism	16.9	13.5	16.8	31.3	29.6	31.1	22.2	22.3	22.3	25.1
Stubbornness	34.8	22.8	34.3	37.9	28.5	37.0	35.9	26.0	35.3	36.9
Understanding of others	58.8	37.3	57.9	63.8	75.3	64.9	60.7	58.9	60.6	65.9
Writing ability	23.0	21.7	22.9	32.5	24.7	31.7	26.5	23.4	26.3	30.5

[a] Self-rating of "above average" or "highest 10 percent" in comparison with "the average student of your own age."

aspiring pharmacists than of freshmen-in-general rated themselves high on artistic ability (13.3 percent versus 19.5 percent), originality (31.8 percent versus 37.4 percent), and writing ability (26.3 percent versus 30.5 percent).

Among aspiring pharmacists, there were notable variations among the subgroups. Thus, nonblack men were particularly likely to rate themselves high on athletic ability and mechanical ability and low on cheerfulness. Black men rated themselves high on social self-confidence, political liberalism, physical attractiveness, and popularity with the opposite sex; at the same time, there was a negative aspect to their self-image in that they tended to give themselves lower ratings than did the other subgroups on academic ability, mathematical ability, originality, public speaking ability, and understanding of others. Their female counterparts were likely to give themselves high ratings on originality and understanding of others and low ratings on athletic ability and popularity with the opposite sex. Nonblack women, on the other hand, had considerable confidence in their intellectual capabilities, rating themselves high on academic ability, mathematical ability, writing ability, artistic ability, and drive to achieve; they were somewhat lacking in social self-confidence, however. Thus, insofar as the traits that would seem to relate to academic achievement are concerned, the positive self-regard of aspiring pharmacists would seem to reside chiefly in the self-perceptions of the nonblack women.

Life Goals

In the life goals they regarded as essential or very important, aspiring pharmacists showed themselves to be very like the average freshman (Table IV-16). On only two were they particularly outstanding: succeeding in their own business (endorsed by 59.6 percent of the aspiring pharmacists versus 37.9 percent of the total freshman class), and being very well-off financially (57.1 percent versus 45.8 percent). The first goal they shared with aspiring physicians and dentists; the second they shared with dentists only. Though 63.5 percent also indicated that they gave priority to becoming an authority in their field, 58.3 percent to raising a family, 58.7 percent to helping others, and 59.1 percent to developing a meaningful philosophy of life, these proportions were close to the national norms and so do not particularly distinguish aspiring pharmacists. Like other aspiring health professionals, they gave particularly low priority to artistic goals. On all other life goals listed in the questionnaire, they were in the average range.

The usual sex differences occurred on the goals of being successful in a business of one's own (endorsed by 69.2 percent of the men but 44 percent of the women), being very well-off financially (endorsed by 62.7 percent of the men but only 47.8 percent of the women), and helping others in difficulty (endorsed by 66.1 percent of the women but 54.2 percent of the men). Women were also more likely to endorse the goal of developing a meaningful philosophy of life (66.2 percent women versus 54.8 percent men).

Table IV-18

Life Goals,[a] by Race and Sex--1974 Aspiring Pharmacists and All Freshmen

Life Goal	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	5.8	8.5	5.9	5.9	12.0	6.5	6.5	10.6	5.7	11.4
Becoming an authority in my field	62.1	71.1	62.4	64.5	73.1	65.2	62.9	72.2	63.5	52.2
Obtaining recognition from my colleagues for contributions to my special field	40.5	52.9	41.0	38.1	52.5	39.4	39.6	52.7	40.4	39.0
Influencing the political structure	11.7	13.9	11.8	6.4	15.0	7.3	9.7	14.9	10.1	12.5
Influencing social values	18.9	15.6	18.7	20.1	29.4	20.9	19.3	23.4	19.5	27.2
Raising a family	59.1	55.6	59.0	57.0	59.0	57.2	58.4	57.5	58.3	55.0
Having administrative responsibility for the work of others	25.9	21.4	24.5	19.7	22.9	15.5	23.5	22.3	23.5	25.6
Being very well off financially	62.9	59.4	62.7	47.1	54.1	47.8	57.0	56.3	57.1	45.6
Helping others who are in difficulty	53.2	77.2	54.2	65.4	73.8	66.1	57.7	75.2	58.7	61.3
Making a theoretical contribution to science	22.9	19.5	22.7	24.9	40.9	26.3	23.6	31.5	24.1	13.0
Writing original works (poems, novels, short stories, etc.)	5.0	16.3	5.5	6.4	9.8	6.7	5.5	12.7	6.0	11.9
Creating artistic work (painting, sculpture, decorating, etc.)	3.8	8.5	4.0	7.6	2.7	7.1	5.1	5.2	5.2	13.3
Being successful in a business of my own	70.6	36.5	69.2	43.2	51.7	44.0	60.6	45.1	59.6	37.9
Becoming involved in programs to clean up the environment	23.1	31.6	23.5	23.5	33.6	24.5	23.2	32.8	23.8	25.9
Developing a meaningful philosophy of life	53.8	77.9	54.8	66.0	68.6	66.2	58.3	72.6	59.1	61.1
Participating in a community action program	25.2	31.2	33.3	26.5	48.9	34.5	25.7	41.2	26.7	27.5
Keeping up to date with political affairs	34.2	34.1	34.2	37.0	44.1	37.6	35.3	39.7	35.6	26.5

[a] Life goals rated as "very important" or essential."

Several goals differentiated the racial/ethnic categories. Blacks were more likely than were nonblacks to give high priority to helping others (75.2 percent versus 57.7 percent), obtaining recognition from colleagues (52.7 percent versus 39.6 percent), becoming an authority (72.2 percent versus 62.9 percent), helping to clean up the environment (32.8 percent versus 23.2 percent), and influencing the political structure (14.9 percent versus 9.7

percent). Thus, the blacks among aspiring pharmacists seemed at once to be more achievement- and success-oriented and more social-minded and altruistic.

Differences among the subgroups emerged with black women being more interested than the others in participating in a community action program, making a theoretical contribution to science, influencing social values, and achieving in a performing art; black men more likely to give high priority to writing original works, developing a meaningful philosophy of life, and creating artistic works such as painting and sculpture; and nonblack men giving particularly high priority to being very well-off financially. Two goals strongly distinguished between the black and the nonblack men in the aspiring pharmacist group: Nonblack men gave very high priority to succeeding in their own business and very low priority to developing a meaningful philosophy of life, whereas the reverse was true for black men.

Identity Groups

About one in three aspiring pharmacists said they identified most deeply with members of their own generation (Table IV-17). Looking at the proportions checking "strongly" or "strongest of all," one finds the five identity groups ranked as follows: "people of own generation" (75.5 percent), "people of own race or ethnic group" (44.5 percent), "people who live in own community" (42.6 percent), "people of own sex" (31.4 percent), "people of own religion" (19.1 percent). This ranking was the same for

Table IV-17

Identity Groups, by Race and Sex--1974 Aspiring Pharmacists and All Freshmen

	Men			Women			Total			National
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Norms
People who live in my community										
Strongest of all	13.2	11.8	13.1	10.9	7.1	10.6	12.3	9.1	12.1	13.6
Strongly	29.1	42.6	29.7	31.1	39.9	31.9	29.8	41.1	30.5	28.6
Moderately	46.4	38.1	46.0	48.2	37.3	47.2	47.1	37.6	46.5	44.0
Little or none	11.4	7.5	11.2	9.8	15.7	10.4	10.8	12.2	10.9	13.8
People of my own religion										
Strongest of all	4.0	16.6	4.6	3.1	1.5	2.9	3.7	8.2	3.9	6.7
Strongly	13.4	29.1	14.1	16.4	24.0	17.1	14.5	26.3	15.2	16.1
Moderately	49.2	38.1	48.7	53.7	49.0	53.3	50.9	44.2	50.5	42.7
Little or none	33.4	16.2	32.6	26.8	25.5	26.7	31.0	21.4	30.4	34.6
People of my own sex										
Strongest of all	1.3	4.0	1.4	3.0	9.5	3.5	1.9	7.0	2.2	3.5
Strongly	24.8	32.4	25.1	35.5	38.7	35.8	28.8	35.9	29.2	32.8
Moderately	64.3	55.7	64.0	56.3	46.7	55.5	61.4	50.7	60.7	56.1
Little or none	9.5	8.0	9.5	5.2	5.1	5.2	7.9	6.4	7.8	7.5
People of my own race or ethnic group										
Strongest of all	7.2	24.1	8.0	8.2	23.7	9.7	7.6	23.9	8.6	8.2
Strongly	32.9	47.6	33.5	38.6	52.3	39.9	35.0	50.3	35.9	34.4
Moderately	49.2	26.6	48.2	42.0	20.2	40.0	46.5	23.0	45.1	45.5
Little or none	10.7	1.6	10.3	11.2	3.8	10.5	10.9	2.9	10.4	11.9
People of my own generation										
Strongest of all	30.7	38.9	31.0	38.0	32.1	37.4	33.4	35.1	33.5	29.1
Strongly	43.4	28.8	42.8	39.7	50.5	40.7	42.1	41.0	42.0	42.6
Moderately	22.1	30.1	22.5	21.3	16.4	20.8	21.8	22.4	21.9	25.1
Little or none	3.7	2.1	3.7	1.0	1.0	1.0	2.7	1.5	2.7	3.1

both racial/ethnic categories, though it should be noted that larger proportions of blacks than of nonblacks seemed to feel a strong identification with each of the groups, particularly with the racial/ethnic group (74.2 percent of the blacks versus 42.6 percent of the nonblacks); moreover, an unusually large proportion of black men (45.7 percent) said that they identified with people of their own religion. Finally, the ranking was the same for the sexes, though again women were more inclined to identify with members of their own sex than were men. The overall findings were virtually identical with the findings for the other aspiring health professionals.

Summary

Despite the greater numbers of women and of minority-group members that have been attracted to pharmacy as a career during recent years, in 1974 the average aspiring pharmacist was still an unmarried 18-year-old white man who entered college directly after high school graduation. Aspiring pharmacists tended to come from a slightly lower socioeconomic level than the average freshman: Their median parental income was around $15,000. Most had fathers and mothers who were no more than high school graduates. Their three main sources of finance for the first year of college were parental support, earnings from their own part-time or summer employment, and savings; blacks in the group drew more heavily on federal student aid programs such as BEOG, SEOG, and CWS and on state and local scholarships. Two-thirds of the aspiring pharmacists felt at least some concern over their ability to finance a college education. Though the image that aspiring pharmacists had of themselves was generally favorable, it was by no means as glowing as that of aspiring physicians and dentists. In their life goals, they were very like the average freshman, though somewhat more inclined to value material success. They were similar to other freshmen also in identifying strongly with people of their own generation.

Finally, the nonblack women planning on careers in pharmacy constituted an especially interesting group: They came from a relatively affluent background, their parents were better-educated than those of other subgroups, and their aspirations and self-perceptions seemed to qualify them for pursuing a career in life.

College Choice

The reason most commonly given by 1974 aspiring pharmacists for their choice of a particular college was its excellent academic reputation; 55.4 percent, compared with 50.4 percent of freshmen-in-general, said this was a "very important" factor in their choice (Table IV-18). It was particularly important to blacks, especially black women. Overall, however, aspiring pharmacists put less emphasis on the college's academic reputation than did aspiring physicians (69.6 percent).

One in three aspiring pharmacists cited the institution's special programs; again, this factor was particularly important to blacks (42.5 percent versus 33 percent of the nonblacks) and to women (38.2 percent versus 30.7 percent of the men). Low tuition was very important to 26.1 percent of the aspiring pharmacists, compared with 27.5 percent of freshmen-in-general. Finally, the offer of financial assistance was judged to be important by only 15.8 percent of the aspiring pharmacists, compared with 18.6 percent of the total freshman class. Over two in five blacks, however, cited financial assistance as crucial in their choice of a college.

Similar proportions of 1972 aspiring pharmacists cited the college's academic reputation and the offer of financial assistance as very important. In the two-year period, the proportions citing special programs increased from 28.9 percent to 33.6 percent, and the proportions citing low tuition increased from 18.3 percent to 26.1 percent.

Table IV-18

Reasons for College Choice, by Race and Sex--1974 and 1972 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1 9 7 4									
Low tuition:									
Very important	27.3	22.1	27.1	24.6	24.0	24.5	26.3	23.2	26.1
Somewhat important	34.1	36.3	34.2	39.1	23.6	37.8	36.0	28.9	35.6
Not important	38.6	4.6	38.7	36.4	52.5	37.7	37.8	47.9	38.4
Special programs offered:									
Very important	30.1	44.5	30.7	38.0	41.0	38.2	33.0	42.5	33.6
Somewhat important	30.1	31.9	[illegible]	32.0	37.4	32.5	30.8	34.9	31.1
Not important	39.8	23.7	[illegible]	30.0	21.6	29.3	36.2	22.5	35.3
Offered financial assistance:									
Very important	12.9	41.1	14.0	16.3	43.7	18.8	14.2	42.6	15.8
Somewhat important	18.6	32.9	19.1	18.9	31.7	20.0	18.7	32.2	19.5
Not important	68.5	26.0	66.9	64.8	24.6	61.2	67.2	25.2	64.7
Very good academic reputation:									
Very important	49.3	63.8	50.0	62.6	80.7	64.2	54.3	73.1	55.4
Somewhat important	41.4	34.4	41.1	31.6	15.5	30.2	37.8	23.9	36.9
Not important	9.3	1.8	9.0	5.8	3.9	5.6	8.0	3.0	7.7
1 9 7 2									
Low tuition:									
Very important	18.8	18.8	18.8	16.5	21.9	17.0	18.1	20.1	18.3
Somewhat important	32.3	24.9	31.9	31.4	17.8	30.1	32.0	21.8	31.4
Not important	48.9	56.3	49.3	52.2	60.3	52.9	49.8	58.0	50.3
Special programs offered:									
Very important	26.6	47.3	27.7	31.9	33.3	32.0	28.1	41.2	28.9
Somewhat important	28.6	28.2	28.6	21.0	42.0	23.0	26.4	34.2	26.9
Not important	44.8	24.5	43.8	47.1	24.7	45.1	45.5	24.6	44.2
Offered financial assistance:									
Very important	13.1	36.6	14.2	22.8	39.8	24.4	15.8	38.0	17.2
Somewhat important	15.4	21.5	15.7	13.8	9.9	13.4	15.0	16.4	15.0
Not important	71.5	41.9	70.1	63.5	50.3	62.2	69.3	45.6	67.8
Very good academic reputation:									
Very important	50.4	63.5	51.0	64.1	69.1	64.5	54.3	65.9	55.0
Somewhat important	38.9	27.5	38.3	30.2	27.5	30.0	36.4	27.5	35.9
Not important	10.8	9.1	10.7	5.7	3.4	5.5	9.3	6.6	9.2

In 1974, seven out of ten aspiring pharmacists enrolled in a public institution, compared with 77.5 percent of all entering freshmen (Figure IV-4). Though sex had no effect on public-private enrollment patterns, race/ethnicity did, in that 71.7 percent of the nonblacks, compared with only 43.6 percent of the blacks, enrolled in public institutions; many blacks enrolled in predominantly black colleges in the private sector. Among nonblacks, there was no systematic relation between parental income and enrollment. For instance, 70.2 percent of the nonblack women from the lowest income range (under $6,000) and around three in four of those from the highest ($25,000 and above) enrolled in public institutions.

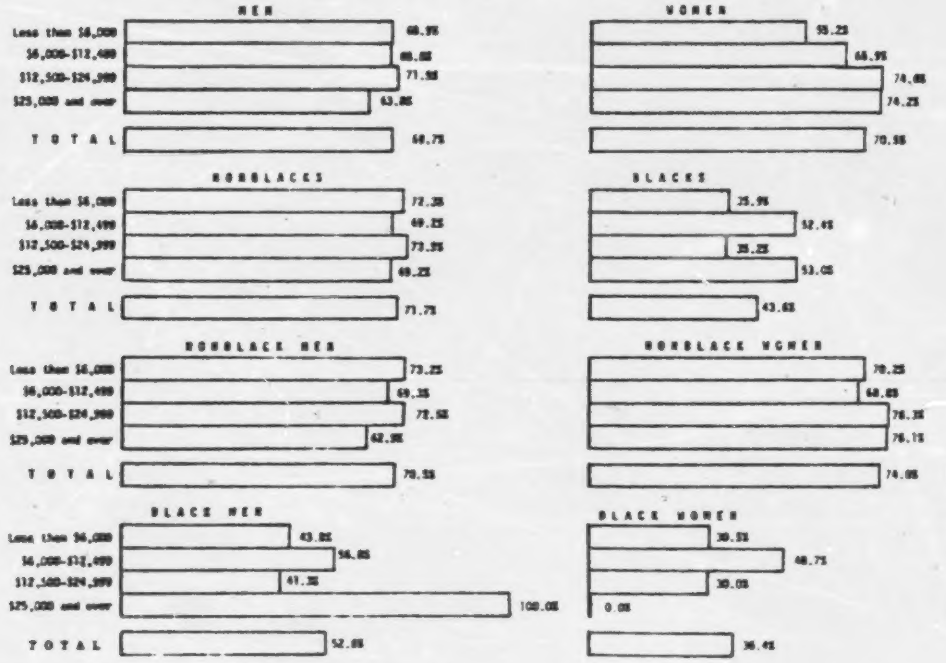


FIGURE IV-4

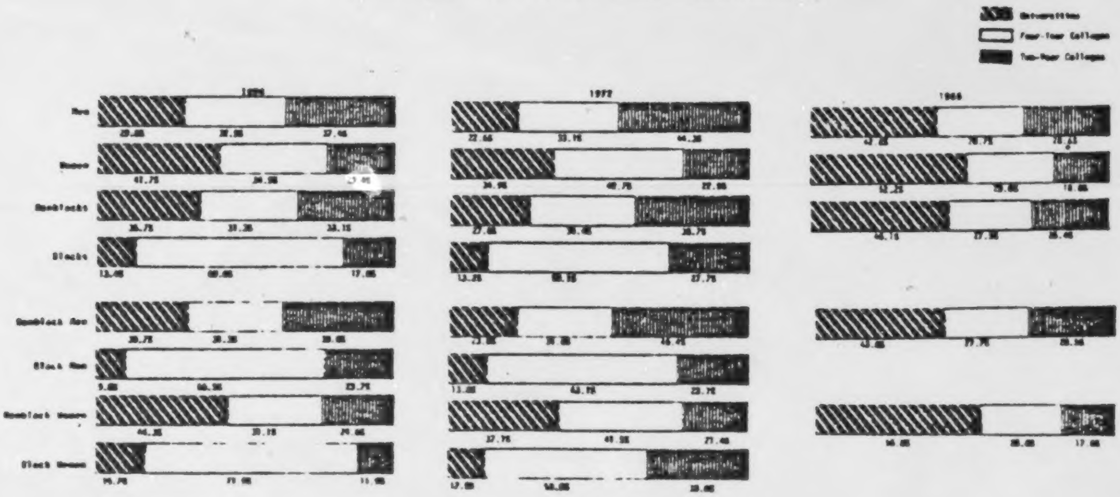
Proportion Enrolled in Public Institutions, by Race and Sex--1974 Aspiring Pharmacists

Among blacks, however, there was curious differential effect by sex: 43.8 percent of black men from the lowest income category and 100 percent of those from the highest enrolled in public institutions, compared with 30.5 percent of black women from the lowest income range and zero percent from the highest.

The 1974 aspiring pharmacists were fairly evenly distributed with respect to type of institution enrolled in: 34.3 percent in universities, 33.6 percent in four-year colleges, and 32.1 percent in two-year colleges. Comparable figures for all freshmen were 24 percent, 35 percent, and 41 percent. Women were more likely to enroll in universities than were men (41.7 percent versus 29.8 percent), and blacks were concentrated in the four-year colleges (69.6 percent), a category that includes most of the predominantly black institutions (Figure IV-5). Among men and among nonblacks, parental income was clearly related to type of institution enrolled

FIGURE IV-5

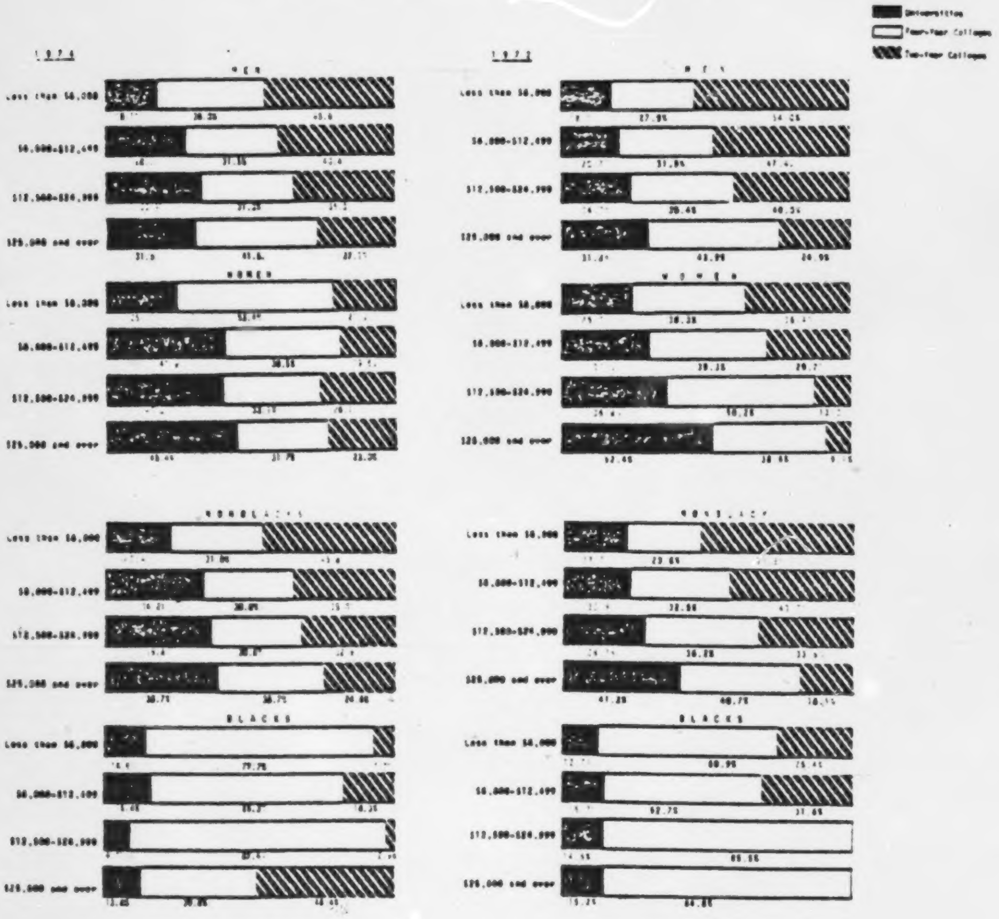
Institutional Attendance Patterns for 1974, 1972, and 1966 Aspiring Pharmacists by Race and Sex



in (Figure IV-6). For instance, 45.9 percent of the men from the lowest income group (under $6,000) and 27.1 percent of those from the highest ($25,000 and above) were enrolled in two-year institutions. Among women and among blacks, however, no such clear relation was discernible. For instance, 21.3 percent of the women from the lowest income group and 23 percent of those from the highest were enrolled in two-year institutions. Curiously, among black

FIGURE IV-6

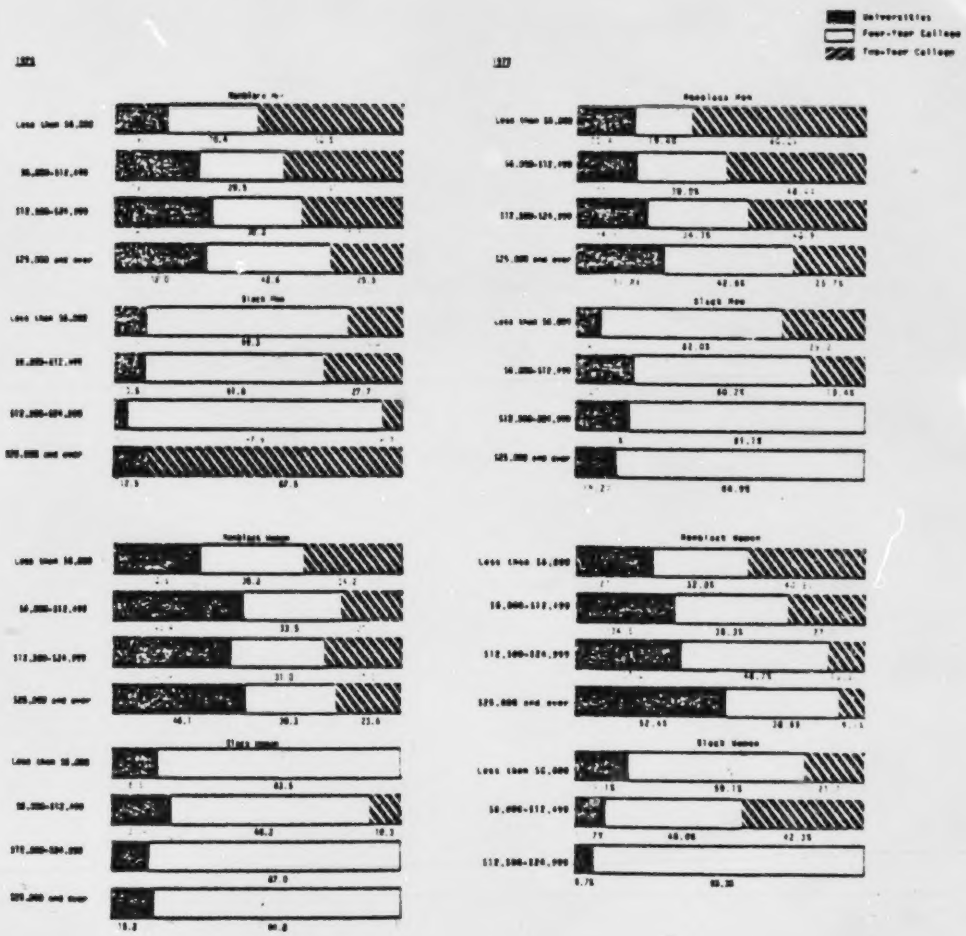
Institutional Attendance Patterns for 1974 and 1972 Aspiring Professionals, by Sex, by Race, and by Parental Income



men, those from the highest-income category were the most likely to enroll in two-year colleges (Figure IV-7).

FIGURE IV-7

Institutional Attendance Patterns for 1970 and 1972 Aspiring Pharmacists, by Race and Sex, and by Parental Income



During the eight years between 1966 and 1974, the proportion of aspiring pharmacists enrolling in universities decreased, and the proportion of nonblack aspiring pharmacists enrolling in two-year colleges increased, parallel to national trends. As was pointed out earlier, attendance at a two-year institution may carry with it certain disadvantages for students planning to become health professionals in that, first, the transfer process often causes delays in baccalaureate completion and, second, many two-year colleges do not offer appropriate study field majors. Among the 1974 aspiring pharmacists, 88 percent of the university entrants, 82.4 percent of the four-year college entrants, and 75.8 percent of the two-year college entrants planned to major in pharmacy (Table IV-19). In addition, however, 38.4 percent of the blacks entering two-year colleges planned to major in health technology, and it is possible that these students will lower their degree

Table IV-19

Probable Study Field Major, by Race and Sex and by Institutional Type--1974 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University:									
Biological sciences	4.3	.0	4.3	.7	7.2	3.9	4.1	5.3	4.1
Health technology	.4	.0	.3	.5	.0	.5	.4	.0	.4
Nursing	—	—	—	—	—	—	—	—	—
Pharmacy	86.0	88.7	86.0	93.6	84.9	90.4	88.1	85.8	88.0
Therapy	.0	—	.0	.0	—	.0	.0	—	.0
Other health fields	.2	—	.2	.0	—	.0	.1	—	.1
Total health fields	90.8	88.7	90.8	94.8	92.0	94.7	92.7	91.1	92.6
Total nonhealth fields	9.2	11.3	9.2	5.2	8.0	5.3	7.3	8.9	7.4
Four-Year College:									
Biological sciences	3.4	10.7	4.1	9.5	5.6	8.8	5.8	7.6	6.0
Health technology	.1	33.5	.5	1.2	.0	1.0	.5	2.1	.7
Nursing	—	—	—	—	—	—	—	—	—
Pharmacy	87.5	63.4	88.3	77.3	80.1	77.8	83.8	71.4	82.4
Therapy	.3	—	.2	.3	—	.2	.3	—	.2
Other health fields	.4	—	.4	.2	—	.0	.3	—	.3
Total health fields	91.8	107.6	90.5	88.4	86.7	87.8	90.7	81.1	89.6
Total nonhealth fields	8.2	7.6	9.5	11.6	14.3	12.2	9.3	18.9	10.4
Two-Year College:									
Biological sciences	6.1	.0	6.0	1.6	.0	1.6	4.8	.0	4.7
Health technology	.0	32.7	.8	.6	34.6	1.7	.2	38.4	1.0
Nursing	—	—	—	—	—	—	—	—	—
Pharmacy	71.7	67.3	71.6	86.7	65.4	86.1	76.0	66.6	75.8
Therapy	.9	—	.8	.0	—	.0	.6	—	.6
Other health fields	.0	—	.0	1.4	—	1.4	.4	—	.4
Total health fields	78.7	100.0	79.2	90.3	100.0	90.8	82.0	105.0	82.5
Total nonhealth fields	21.3	.0	20.8	9.7	.0	9.2	18.0	5.0	17.5

aspirations during the college years. This possibility becomes stronger when one considers that only 28.5 percent of the black men and slightly over half of the black women enrolling in two-year colleges reported that they would probably transfer to another institution before graduation (Table IV-20). Comparable figures for nonblacks were 57.6 percent of the men and 66.3 percent of the women. Apparently many two-year college students who aspire to become pharmacists are not aware of the academic requirements involved: namely, a minimum of five years (two in lower division and three in a school or college of pharmacy, resulting in a Bachelor of Science in Pharmacy or a Bachelor of Pharmacy degree; and in some cases, six years, resulting in a Doctor of Pharmacy degree). Over 50 percent of the university entrants and 36.9 percent of the four-year college entrants reported that the baccalaureate was the highest degree they planned to get (Table IV-21). In view of the special nature of the required curriculum, these aspirations may be entirely consistent with their career plans.

Table IV-20

Proportion Likely to Transfer to Another College,[a] by Race and Sex and by Institutional Type--1974 Aspiring Pharmacists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University	41.6	6.4	41.1	43.3	36.1	43.2	42.3	31.3	42.1
Four-year college	45.0	33.4	44.0	62.9	36.4	58.0	51.4	35.2	49.5
Two-year college	57.6	28.5	56.8	66.3	51.1	65.6	59.9	37.5	59.1

[a] Proportion indicating that there was "some chance" or "a very good chance" that they would transfer to another college before graduating.

Table IV-21

Degree Plans, by Race and Sex, and by Type of Institution--1974 Aspiring Pharmacists

	Men			Men			Women		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Universities									
Bachelor's	49.6	16.6	49.1	57.0	26.7	55.8	53.0	23.7	52.3
Master's	16.3	37.3	16.6	22.6	23.1	22.7	19.2	27.4	19.4
Ph.D. or Ed.D.	18.0	.0	17.8	12.0	45.9	13.2	15.2	32.0	15.6
Medical degree	8.8	28.8	9.1	4.7	4.2	4.7	6.9	11.7	7.0
Other	7.3	17.3	7.4	3.7	.1	3.6	5.7	5.2	5.7
Four-Year Colleges									
Bachelor's	36.9	23.7	35.9	42.2	20.8	38.5	38.8	22.0	36.9
Master's	29.5	36.6	30.0	21.1	37.1	23.9	26.5	36.9	27.7
Ph.D. or Ed.D.	19.3	4.5	18.2	20.1	32.7	22.3	19.6	21.2	19.8
Medical degree	8.4	21.6	9.4	10.0	9.4	9.9	9.0	14.3	9.6
Other	5.9	13.6	6.5	6.6	.0	5.4	6.1	5.6	6.0
Two-Year Colleges									
Bachelor's	36.2	48.4	36.6	35.2	100.0	37.7	35.9	64.7	36.9
Master's	28.3	23.5	28.1	37.1	--	35.7	30.7	16.1	30.2
Ph.D. or Ed.D.	12.3	23.1	12.7	12.1	--	11.7	12.3	15.8	12.4
Medical degree	14.2	.0	13.8	7.0	--	6.7	12.2	.0	11.8
Other	9.0	5.0	8.8	8.6	--	8.2	8.9	3.4	8.7

Career Choice

Asked to indicate their reasons for choosing a career in pharmacy, 62.9 percent of the 1974 aspiring pharmacists cited the opportunity to be helpful to others (Table IV-22). The availability of job openings was the next most frequently cited reason (61.8 percent), followed by intrinsic interest in the field (61.4 percent). All three of these factors were checked as very important by about 72 percent of the women but only about 55 percent of the men. Larger proportions of men (59 percent) than of women (53.1 percent), however, mentioned high anticipated earnings; this was a particularly important consideration among blacks at lower-income levels. Just over half the total group of aspiring pharmacists mentioned ability to work with people, 46.4 percent cited the opportunity to make an important contribution to society, and 44.8 percent mentioned the chance for steady progress. About two in five said they had chosen pharmacy because it is a well-respected and prestigious profession and because it offered opportunities for independence. Such factors as the chance to work with ideas and lack of pressure were mentioned by very few.

Table IV-22

Reasons[a] for Career Choice, by Race and Sex--1974 Aspiring Pharmacists

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Job openings generally available	54.8	62.3	56.0	71.7	77.9	72.3	61.2	71.9	61.6	46.8
Rapid career advancement possible	37.7	47.0	38.1	32.8	54.1	34.7	35.9	51.2	36.8	34.0
High anticipated earnings	57.7	56.1	59.0	52.9	56.8	53.1	56.9	56.0	55.9	41.7
Well-respected or prestigious occupation	38.2	36.1	38.1	43.5	43.5	43.5	40.2	40.5	40.2	38.2
Great deal of independence	38.6	43.0	38.7	41.1	49.8	41.9	39.5	47.2	40.0	43.1
Chance for steady progress	44.4	65.9	45.2	42.4	61.4	44.1	43.6	63.1	44.8	40.7
Can make an important contribution to society	39.8	59.1	40.5	53.9	73.8	55.7	45.1	68.1	46.4	47.2
Can avoid pressure	14.6	16.3	14.7	16.1	23.6	16.8	15.2	20.7	15.5	17.0
Can work with ideas	21.2	34.5	21.7	22.6	29.2	23.2	21.7	31.3	22.2	46.1
Can be helpful to others	56.6	58.8	56.6	72.3	78.4	72.8	62.4	68.9	62.9	69.8
Able to work with people	46.0	49.2	46.1	57.7	68.5	58.6	50.4	60.9	51.0	61.3
Intrinsic interest in the field	58.1	64.3	58.5	72.3	71.9	72.2	60.9	68.6	61.4	67.4

[a] Reasons indicated as "very important."

Thus, the motivation of these aspiring pharmacists are a mixture of the altruistic and the materialistic. Perhaps it is more meaningful to indicate the top-ranked reason for each subgroup: Nonblack men were likely to choose pharmacy because it promised high earnings (57.7 percent); black men, because it offered a chance for steady progress (65.9 percent); nonblack women, because of intrinsic interest and the opportunity to be helpful to people (72.3 percent each); and black women, because it offered the opportunity to be helpful to people (78.4 percent). There was no discernible systematic relation between reasons given for the career choice and parental income, except that low-income aspiring

Table IV-23

Reasons[a] for Career Choice, by Race, by Sex, and by Income Level—1976 Aspiring Pharmacists

	Men	Women	Nonblacks	Blacks
Job openings generally available:				
Less than $6,000	44.0	48.5	47.9	73.3
$6,000 - $12,499	57.6	50.2	56.7	77.1
$12,500 - $24,999	59.8	55.5	64.3	48.8
$25,000 and over	56.8	48.4	60.6	71.9
Rapid career advancement possible:				
Less than $6,000	29.6	31.8	31.7	50.3
$6,000 - $12,499	29.8	29.9	38.4	50.0
$12,500 - $24,999	40.4	33.2	37.8	32.3
$25,000 and over	33.2	23.0	33.5	16.6
High anticipated earnings:				
Less than $6,000	41.2	44.1	34.6	60.0
$6,000 - $12,499	60.7	50.7	57.5	56.0
$12,500 - $24,999	60.6	54.3	58.6	52.6
$25,000 and over	50.3	58.8	53.8	16.0
Well-respected or prestigious occupation:				
Less than $6,000	39.4	43.0	38.0	50.5
$6,000 - $12,499	37.6	47.8	41.5	34.8
$12,500 - $24,999	36.9	44.2	28.5	48.3
$25,000 and over	36.7	38.6	37.5	43.1
Great deal of independence:				
Less than $6,000	55.1	49.2	53.4	71.0
$6,000 - $12,499	34.4	38.7	34.0	48.8
$12,500 - $24,999	38.4	42.4	38.4	45.8
$25,000 and over	39.5	48.0	43.3	18.2
Chance for steady progress:				
Less than $6,000	52.3	45.4	43.3	71.8
$6,000 - $12,499	44.1	43.5	42.6	60.1
$12,500 - $24,999	46.7	48.5	45.3	54.4
$25,000 and over	42.7	38.2	38.8	71.3
Job seen as important contribution to society:				
Less than $6,000	49.9	70.1	52.1	75.4
$6,000 - $12,499	43.7	58.7	46.0	66.6
$12,500 - $24,999	36.2	55.3	43.0	58.3
$25,000 and over	38.8	47.9	42.7	62.3
Can avoid pressure:				
Less than $6,000	11.9	21.2	14.7	17.7
$6,000 - $12,499	11.6	16.7	12.4	18.3
$12,500 - $24,999	19.8	14.3	14.8	27.6
$25,000 and over	19.6	23.3	19.4	16.0
Can work with ideas:				
Less than $6,000	18.7	36.5	21.8	30.3
$6,000 - $12,499	13.3	21.4	19.6	21.1
$12,500 - $24,999	23.8	30.8	22.4	38.5
$25,000 and over	27.4	29.5	27.7	50.1
Can be helpful to others:				
Less than $6,000	54.7	72.4	56.9	78.6
$6,000 - $12,499	54.7	72.1	60.4	62.3
$12,500 - $24,999	50.1	73.2	64.3	68.2
$25,000 and over	52.5	80.2	50.6	91.8
Able to work with people:				
Less than $6,000	40.4	51.9	46.6	63.9
$6,000 - $12,499	39.0	56.1	44.2	52.3
$12,500 - $24,999	47.4	61.5	52.5	59.3
$25,000 and over	56.0	50.2	54.9	66.5
Intrinsic interest in the field:				
Less than $6,000	60.9	68.4	67.0	72.1
$6,000 - $12,499	52.7	69.0	56.4	75.0
$12,500 - $24,999	52.8	70.8	62.0	50.1
$25,000 and over	57.1	60.5	67.4	91.0

[a] Reason indicated as "very important."

pharmacists were more likely than the higher-income ones to mention making a contribution to society (Table IV-23).

Summary

Though pharmacy as a career has become increasingly attractive to women and to minority-group members since 1966, the typical student who, at the time of college entry in 1974, expressed an interest in becoming a pharmacist was still a white man. Aspiring pharmacists differed in many ways from aspiring physicians and dentists and seemed to have much more in common with freshmen-in-general. The median parental income for aspiring pharmacists was slightly lower than that for the total freshman class; moreover, their parents were more likely to be high school graduates than college graduates and less likely to be employed in high-status occupations such as the professions. Though most rated themselves high on drive to achieve, intellectual self-confidence, academic ability, and mathematical ability, aspiring pharmacists did not have as favorable a self-image as aspiring physicians and dentists.

Their motives and values (as indicated by the priority they gave to various life goals and reasons for career choice) reflected a mixture of altruism and materialism.

The picture of the aspiring pharmacists that emerges from the data presented here is somewhat confused and vague; this lack of clarity can probable be attributed to the heterogeneity of the group: Each of the four analytic subgroups seems to have somewhat different characteristics. Thus, it is somewhat misleading to look at just the totals in the tables; one must examine the findings for each of these subgroups. What such an examination seems to suggest is that nonblack men who aspire to become pharmacists are a rather average lot, whereas nonblack women with the same career aspirations are more distinctive from the norm. They come from more affluent backgrounds, have better-educated parents, are highly motivated, and seem capable of pursuing a career in pharmacy. The profiles for the black men and women in the group are less sharply defined.

The implications of these differences are that pharmacy, as a career choice, represents a prestigious and high-level choice for the woman in our society but not for the man. Possibly, the academic program involved in becoming a pharmacist does not demand the same kind of commitment of time and energy as is required by the study of medicine or dentistry. Nonetheless, to the able and ambitious young woman who is seeking a career that will give her status and security and will free her from the confinement of the traditional female-typed occupations, pharmacy represents an attractive option.

CHAPTER V - ASPIRING OPTOMETRISTS

HIGHLIGHTS

- In the fall of 1974, 4,041 first-time, full-time freshmen (.2 percent of the total entering class) named optometry as their career choice. This represents an increase of about 200 percent over 1966 in the number of aspiring optometrists. The increase was greatest among women (481.7 percent) and nonblacks (205.7 percent); the growth in the number of blacks (especially black women) was much smaller, and their proportion actually dropped, from 5.4 percent in 1966 to 3.8 percent in 1974. Thus, over the eight-year span, optometry as a freshman career choice became even more predominantly nonblack but less "masculine" (from 83.7 percent men in 1966 to 68.6 percent men in 1974).

- The typical aspiring optometrist, in 1974 as in 1966, was an 18-year-old white man from a relatively high socioeconomic background; he was twice as likely as was the average freshman to report that his father had an advanced degree. His father was also likely to be an optometrist or to work in one of the other health professions. The typical aspiring optometrist had a greater tendency than did other nonblack men planning health professional careers to regard himself as popular, popular with women, and socially self-confident; and he also rated himself high on drive to achieve and on academic, mathematical, and athletic ability. His life goals reflected a variety of interests: succeeding in his own business, becoming an authority in his field, developing a meaningful philosophy, being very well-off financially, winning recognition from colleagues, participating in community action programs, influencing social values, having administrative responsibility over others, and becoming accomplished in a performing art. He cited both altruistic and instrumental reasons for his career choice, with particular emphasis on opportunities for independence. He was likely to enroll in a two-year college (from which he planned to transfer) or a university, and his degree and study field plans were consistent with his career aspirations, suggesting that he will succeed in reaching his freshman goals.

- Nonblack women aspiring to optometry, in marked contrast to their male counterparts, had a dismal self-image, seeing themselves as no more than average on most traits, intellectual and social. Indeed, only one in ten regarded herself as especially attractive, and only one in twenty thought of herself as popular with men. The life goals of these women were modest: Though they emphasized helping others, participating in community action programs, and raising a family, relatively few aimed at either occupational achievement or material success. As very important factors in their career choice, they most frequently cited the chance to help others and their ability to work with other people. These women were more likely than were most other nonblack aspiring health professionals, male or female, to be 19 or older at college entry, to have delayed college entry by a year or more, and to claim financial independence from their parents. Their median parental income was low, and they relied on their own savings and on loans to finance their college education; nonetheless, they were not especially concerned about their ability to pay for college. Almost two-thirds enrolled in two-year colleges, and only 7.5 percent of these planned to transfer. Further, substantial proportions in all types of institutions planned to major in nursing or health technology. In short, their educational plans are inconsistent with their career goals, suggesting that many of these women will end up in other, lower-level health occupations.

General Characteristics

In the fall of 1974, 3.2 percent of the freshmen interested in pursuing a career in the health professions named optometry as their future occupation. This group (for convenience referred to as aspiring optometrists) is described here and, where appropriate, compared with corresponding groups from two earlier freshman classes (1966 and 1972), with the total 1974 freshman class, and with other groups of aspiring health professionals.

In 1974, optometry attracted only 4,041 students (.2 percent of the total first-time, full-time entering freshman class); in earlier years the number of students choosing optometry as their career was even smaller. Because a decision was made to exclude from the analyses any subcategory that contained fewer than 50 unweighted cases, no racial/ethnic comparisons are made in this chapter, and sex comparisons are made only when discussing aspiring optometrists from the 1974 and 1972 freshman classes. Table V-1 shows the number of aspiring optometrists, by sex and race/ethnicity (nonblack and black), in all three freshman classes; asterisks alert the reader to the subgroups where the cases were too few for reliable analyses.

Table V-1

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Optometrists, by Race and Sex

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	2,683	90*	2,773	1,205	63*	1,268	3,888	153*	4,041
1972	2,817	39*	2,856	393	44*	437	3,211	83*	3,293
1966	1,101	25*	1,126	171*	47*	218*	1,272	73	1,345

*Actual numbers were too small for further analyses.

The following sections profile aspiring optometrists in terms of their demographic and background characteristics, college finances, self-ratings, life goals, and identity groups.

Sex and Race/Ethnicity

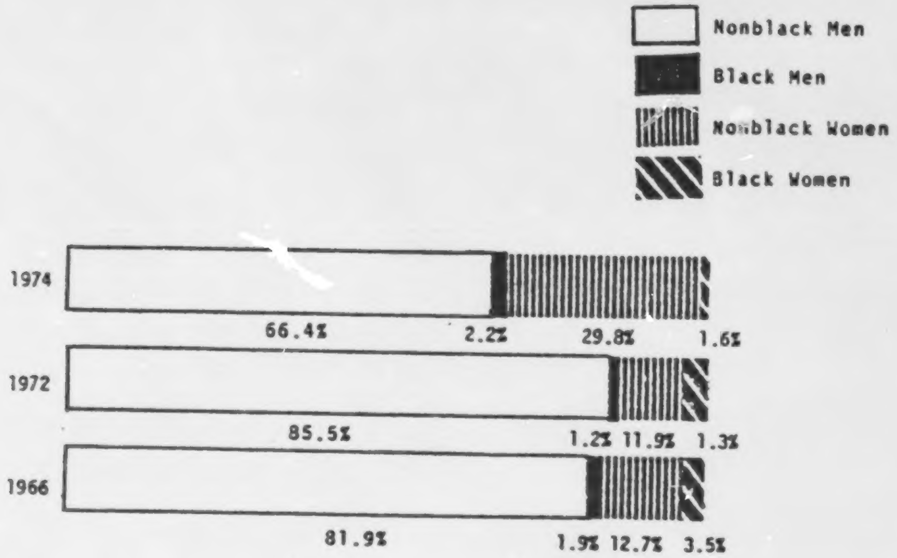
As was the case with all the health professions, optometry was a typically masculine field which has recently begun to attract more women as well as more minority-group members. The proportion of women among aspiring optometrists just about doubled in the eight-year period covered by this study: from 16.2 percent in 1966 to 31.4 percent in 1974; and the number of women naming optometry as their freshman career choice jumped dramatically, by 481.7 percent. In contrast to other health professional fields (e.g., medicine, dentistry) which lost men, the number of men naming optometry as a future occupation increased by 146.3 percent between 1966 and 1974.

The proportion of blacks interested in optometry declined from 5.4 percent in 1966 to 3.8 percent in 1974, whereas the proportion of blacks in the total freshman class increased from 5 percent in 1966 to 7.4 percent in 1974. Because of the small number of students involved, however, one cannot reliably assume that blacks lost interest in optometry as a career in the eight-year period. Basically, optometry appealed to very few freshmen, the majority of whom were white males (Figure V-1).

About one in twenty aspiring optometrists classified as non-

FIGURE V-1

Race and Sex Distribution of 1966, 1972, and 1974 Freshmen Aspiring to Become Optometrists



black belonged to a racial/ethnic minority. Of this group, Orientals constituted the largest subcategory in 1974, followed by Puerto Ricans, "other" racial/ethnic minority-group members, American Indians, and Mexican-Americans (Table V-2). The number of nonblack minority

Table V-2

Numbers and Distribution of Nonblack Minority Group Members Aspiring to Become Optometrists--1974, 1972, and 1966 Freshmen Classes

	1974		1972		1966	
	N	%	N	%	N	%
American Indian	47	18.6	9	5.1	0	---
Oriental	71	28.1	70	39.3	52	82.5
Mexican American	25	9.9	84	47.2	---	---
Puerto Rican	56	22.1	10	5.6	---	---
Other	54	21.3	5	2.8	11	17.5
TOTAL	253	100.0	178	100.0	63	100.0

students interested in optometry as a career goal increased by 301.6 percent between 1966 and 1974; still, their numbers were too small to warrant further analyses. Thus, the following sections will not discuss blacks as a group or make racial/ethnic comparisons. The tables show data for nonblacks but not for blacks; data for blacks are, however, included in the totals.

Age and Marital/Dating Status

Like most freshmen planning on a career in the health professions, the typical aspiring optometrist entered college at age 18, directly after high school graduation (Tables V-3 and V-4). But aspiring optometrists were more apt to be slightly older than aspirants to the other health professions: For instance, one-fifth of aspiring optometrists, but only 14.1 percent of aspiring physi-

Table V-3

Age Distribution, by Race and Sex--1974 Aspiring Optometrists

Age, as of 31 December, 1974	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
16 or younger	.0	—	.0	.0	—	.0	.0	—	.0
17	5.1	—	5.3	.3	—	.5	3.6	—	3.8
18	73.3	---	73.8	78.2	—	77.1	74.8	—	74.8
19	18.0	—	17.4	17.0	—	18.1	17.7	—	17.6
20	2.6	—	2.5	2.5	—	2.4	2.6	—	2.5
21 or older	1.0	—	1.0	2.1	—	2.0	1.4	—	1.3

Table V-4

High School Graduation Year/Status, by Race and Sex--1974 Aspiring Optometrists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Graduated 1974	92.3	---	92.5	92.8	—	91.5	92.4	---	92.2
Graduated 1973	3.5	---	3.4	2.6	—	2.5	3.2	---	3.1
Graduated 1972	.9	—	.9	2.5	---	4.1	1.4	---	1.9
Graduated 1971 or earlier	.8	---	.8	2.1	—	2.0	1.2	---	1.2
Passed G.E.D. test	.0	—	.0	.0	---	.0	.0	---	.0
Never completed high school	2.6	---	2.5	.0	—	.0	1.8	---	1.7

cians, were age 19 or 20 at college entry. Consistent with this tendency, slightly more aspiring optometrists (6.2 percent) said they had delayed college entry by a year or more after high school graduation. Only 2.9 percent of the aspiring optometrists were married or engaged at the time of college entry (Table V-5).

Table V-5

Marital/Dating Status, by Race and Sex--1974 Aspiring Optometrists

Marital/Dating Status	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Presently married	.9	---	.9	2.1	---	2.0	1.3	---	1.3
Presently engaged	1.1	---	1.1	2.6	---	2.7	1.6	---	1.6
Have been seeing one person exclusively	32.7	---	32.0	45.9	---	45.3	36.8	---	36.2
Have been seeing several persons, but no one exclusively	49.3	---	50.6	27.6	---	27.5	42.6	---	43.3
Have not been dating in recent months	16.0	---	15.5	21.9	---	22.5	17.8	---	17.7

Women were more likely than were men to be married, engaged, or dating one person exclusively. Half the men said they dated several persons, and 17.7 percent of the total group had not been dating in recent months.

Socioeconomic Background

In 1974, aspiring optometrists had the second lowest median parental income among all five groups of aspiring health professionals: Pharmacists had the lowest, while physicians had the highest (Table V-6). Nonetheless, the median parental income of $15,200 reported by aspiring optometrists was $812 more than the median parental income reported by all freshmen. Women tended to come from less affluent backgrounds, their median parental income being only four-fifths that of men.

Table V-6

Parental Income(1973), by Race and Sex--1974 Aspiring Optometrists

Parental Income (1973)	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Less than $3,000	1.7	---	1.7	.0	---	.3	1.2	---	1.2
$3,000 - $3,999	2.3	---	2.3	2.8	---	4.0	2.4	---	2.8
$4,000 - $5,999	.8	---	1.0	4.5	---	4.4	1.9	---	2.0
$6,000 - $7,999	4.9	---	5.1	9.7	---	9.3	6.4	---	6.4
$8,000 - $9,999	6.0	---	6.1	11.1	---	11.1	7.6	---	7.6
$10,000 - $12,499	10.9	---	10.6	17.1	---	17.4	12.8	---	12.7
$12,500 - $14,999	17.4	---	17.6	14.2	---	14.0	16.4	---	16.4
$15,000 - $19,999	23.4	---	24.0	10.0	---	9.6	19.3	---	19.5
$20,000 - $24,999	11.5	---	11.5	7.2	---	6.9	10.2	---	10.1
$25,000 - $29,999	6.0	---	5.7	6.2	---	6.5	6.0	---	6.0
$30,000 - $34,999	2.9	---	2.8	10.2	---	9.8	5.2	---	5.0
$35,000 - $39,999	5.2	---	5.0	1.5	---	1.5	4.0	---	3.9
$40,000 - $49,999	1.8	---	1.8	3.1	---	3.0	2.2	---	2.2
$50,000 or more	5.2	---	5.0	2.4	---	2.3	4.3	---	4.2
MEDIAN	$16,285	---	$16,211	$13,354	---	$13,150	$15,350	---	$15,200

When the median incomes for 1966, 1972, and 1974 are converted into 1966 constant dollars as deflated by the Consumer Price Index, one finds surprisingly little change in the parental incomes reported by aspiring optometrists during the eight-year period studied here (Table V-7).

Table V-7

Median Parental Income in Constant Dollars,[a] by Race and Sex--1974, 1972, and 1966 Aspiring Optometrists

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	$11,124	---	$11,073	$9,122	---	$8,982	$10,485	---	$10,383
1972	$10,320	---	$10,282	$11,104	---	$11,440	$10,422	---	$10,427
1966	$10,743	---	$10,602	---	---	---	$10,521	---	$10,183

[a] Median Parental income figures are in fiscal 1966 constant dollars as deflated by the Consumer Price Index.

The fathers of aspiring optometrists had educational backgrounds similar to those reported by freshmen-in-general but somewhat lower than those reported by aspiring physicians and dentists. For instance, 33.2 percent of the 1974 aspiring optometrists, 31.5 percent of all freshmen, but 47.8 percent of aspiring physicians reported that their fathers were college graduates. Consistent with their less affluent backgrounds, only 17.3 percent of the women, compared with 40.3 percent of the men, reported having college-educated fathers (Table V-8).

Table V-8

Father's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Optometrists

Father's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	6.2	---	6.1	13.5	---	13.1	8.5	---	8.2
Some high school	5.8	---	7.8	11.9	---	12.7	7.7	---	9.3
High school graduate	29.5	---	28.6	45.3	---	44.4	34.4	---	33.5
Postsecondary school other than high school	3.4	---	3.8	2.2	---	2.4	3.0	---	3.3
Some college	13.7	---	13.5	10.0	---	10.1	12.6	---	12.5
College degree	21.0	---	20.5	9.5	---	9.6	17.5	---	17.1
Some graduate school	.3	---	.3	.8	---	.8	.5	---	.5
Graduate degree	20.2	---	19.5	6.8	---	6.9	16.0	---	15.6
1972:									
Grammar school or less	6.0	---	5.9	4.9	---	4.4	5.8	---	5.7
Some high school	15.7	---	16.0	14.9	---	15.1	15.6	---	15.9
High school graduate	27.7	---	27.3	14.7	---	14.8	26.1	---	25.6
Some college	20.3	---	20.5	21.6	---	26.2	20.5	---	21.3
College degree	14.6	---	14.6	23.0	---	20.7	15.6	---	15.4
Some graduate school	3.8	---	4.0	.0	---	.0	3.3	---	7.1
Graduate degree	11.9	---	11.7	21.0	---	18.9	13.0	---	12.7
1966:									
Grammar school or less	7.0	---	6.9	---	---	---	6.1	---	6.6
Some high school	15.2	---	16.7	---	---	---	18.6	---	21.5
High school graduate	30.3	---	29.6	---	---	---	30.0	---	28.4
Some college	22.1	---	21.6	---	---	---	20.1	---	19.0
College degree	16.0	---	16.1	---	---	---	16.6	---	16.1
Postgraduate degree	9.3	---	9.1	---	---	---	8.6	---	8.5

The educational level of the mothers of aspiring optometrists was generally lower than that of the fathers. Moreover, women tended to have less educated mothers than did men: 13.8 percent of the women but 21.6 percent of the men reported that their mothers had at least a college education (Table V-9). A comparison with earlier cohorts suggests that 1974 aspiring optometrists came from less educated backgrounds than their predecessors although no significant difference was found in the parental incomes reported by students during the eight-year period studied.

Table V-9

Mother's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Optometrists

Mother's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	3.9	---	4.0	3.7	---	3.5	3.8	---	3.8
Some high school	5.1	---	5.3	13.4	---	13.9	7.7	---	8.0
High school graduate	47.1	---	45.5	49.6	---	49.1	47.9	---	46.7
Postsecondary school other than high school	4.6	---	4.9	5.6	---	5.7	4.9	---	5.1
Some college	18.9	---	18.8	13.2	---	14.1	17.1	---	17.3
College degree	16.0	---	16.8	8.4	---	8.0	13.7	---	14.0
Some graduate school	1.2	---	1.1	1.7	---	1.6	1.3	---	1.3
Graduate degree	3.4	---	3.7	4.4	---	4.2	3.7	---	3.8
1972:									
Grammar school or less	5.9	---	5.8	4.3	---	3.9	5.7	---	5.5
Some high school	10.4	---	10.8	12.7	---	13.1	10.7	---	11.1
High school graduate	51.7	---	51.0	49.5	---	44.9	51.4	---	50.2
Some college	15.4	---	15.7	15.2	---	20.6	15.4	---	16.3
College degree	11.2	---	11.3	11.1	---	9.9	11.2	---	11.1
Some graduate school	2.1	---	2.1	.0	---	.0	1.9	---	1.8
Graduate degree	3.3	---	3.4	7.3	---	7.7	3.7	---	4.0
1966:									
Grammar school or less	4.1	---	4.0	---	---	---	3.5	---	3.3
Some high school	11.1	---	10.8	---	---	---	13.2	---	15.7
High school graduate	54.5	---	53.2	---	---	---	51.5	---	48.7
Some college	18.4	---	18.0	---	---	---	21.1	---	20.2
College degree	10.0	---	12.1	---	---	---	9.1	---	10.5
Postgraduate degree	1.9	---	1.9	---	---	---	1.7	---	1.6

Only about three in ten aspiring optometrists had fathers who could be classified as blue-collar workers; the great majority were in professional, managerial, or paraprofessional jobs as was the case with freshmen-in-general (Table V-10). We have already reported that the father's working in a health field was related to the student's choice of a health profession. This relation was most striking among aspiring optometrists: 11.3 percent of the men and 4.7 percent of the women reported that their fathers were

Table V-10

Father's Occupation, by Race and Sex--1974 Aspiring Optometrists

Father's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	2.8	---	2.7	.9	---	1.1	2.2	---	2.2
Dentist	1.0	---	1.0	.3	---	.3	.8	---	.8
Pharmacist	.1	---	.1	.8	---	.8	.3	---	.3
Optometrist	11.6	---	11.3	4.9	---	4.7	9.5	---	9.2
Veterinarian	1.5	---	1.5	.2	---	.2	1.1	---	1.1
Nurse	.0	---	.0	.0	---	.0	.0	---	.0
Home economist-dietician	.0	---	.0	.0	---	.0	.0	---	.0
Health technician or technologist	.4	---	.4	.0	---	.0	.3	---	.3
Therapist	.0	---	.0	.0	---	.0	.0	---	.0
Artist	.0	---	.0	.0	---	.0	.0	---	.0
Business manager	26.4	---	27.1	20.6	---	20.0	24.6	---	24.9
Clergy	.3	---	.3	.0	---	.0	.2	---	.2
Educator (college)	.4	---	.4	.0	---	.0	.3	---	.3
Educator (secondary)	2.9	---	2.8	1.3	---	1.3	2.4	---	2.4
Educator (elementary)	1.2	---	1.2	.0	---	.0	.8	---	.8
Education (special)	.6	---	.6	.0	---	.0	.4	---	.4
Engineer	7.4	---	7.2	4.2	---	4.1	6.4	---	6.2
Farmer/Forester	5.1	---	5.0	10.9	---	10.5	6.9	---	6.9
Lawyer	.1	---	.1	3.0	---	2.9	1.0	---	1.0
Research scientist	.3	---	.3	.0	---	.0	.2	---	.2
Skilled worker	17.0	---	17.1	27.8	---	27.4	20.4	---	20.3
Unskilled worker	5.1	---	5.0	18.5	---	18.1	9.3	---	9.1
Other professional[a]	3.7	---	3.6	.6	---	1.1	2.7	---	2.8
Other nonprofessional[b]	11.5	---	11.6	6.0	---	7.3	9.8	---	10.2
Unemployed	.7	---	.9	.0	---	.2	.5	---	.7

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

optometrists themselves.

Fewer than one in twenty aspiring optometrists reported that their mothers were employed in a health field (Table V-11). Interestingly, 12.1 percent of women but only 2.3 percent of men had mothers who worked in business, while 7 percent of the men but only 3.6 percent of the women had mothers who were educators. The majority of aspiring optometrists (70.2 percent) reported that their mothers were in "other nonprofessional" occupations, a category that includes homemakers.

In summary, the typical freshman planning to pursue a career

Table V-11

Mother's Occupation, by Race and Sex--1974 Aspiring Optometrists

Mother's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.0	---	.0	.0	---	.0	.0	---	.0
Dentist	.0	---	.0	.0	---	.0	.0	---	.0
Pharmacists	.0	---	.0	.2	---	.2	.1	---	.1
Optometrists	.0	---	.0	2.4	---	2.4	.8	---	.8
Veterinarian	.0	---	.0	.0	---	.0	.0	---	.0
Nurse	3.3	---	3.1	.2	---	.2	2.3	---	2.2
Home economist-dietician	.0	---	.0	.3	---	.3	.1	---	.1
Health technician or technologist	.3	---	.3	.5	---	.4	.3	---	.3
Therapist	.0	---	.0	.0	---	.0	.0	---	.0
Artist	.6	---	.6	.2	---	.2	.5	---	.5
Business manager	2.3	---	2.3	12.5	---	12.1	5.5	---	5.4
Clergy	.1	---	.1	.0	---	.0	.1	---	.1
Educator (college)	.0	---	.4	.0	---	.0	.0	---	.3
Educator (secondary)	1.4	---	1.3	2.2	---	2.1	1.6	---	1.6
Educator (elementary)	3.1	---	3.0	1.1	---	1.0	2.4	---	2.3
Education (special)	2.4	---	2.3	.5	---	.5	1.8	---	1.7
Engineer	.0	---	.0	.0	---	.0	.0	---	.0
Farmer/forester	.0	---	.0	.0	---	.0	.0	---	.0
Lawyer	.0	---	.0	.8	---	.8	.3	---	.3
Research scientist	.1	---	.1	.0	---	.0	.1	---	.1
Skilled worker	.3	---	.3	.0	---	.0	.2	---	.2
Unskilled worker	1.8	---	2.4	2.6	---	2.9	2.0	---	2.6
Other professional[a]	2.0	---	3.2	.3	---	.3	1.4	---	2.3
Other nonprofessional[b]	70.5	---	68.9	72.5	---	73.0	71.1	---	70.2
Unemployed	12.1	---	11.7	3.8	---	3.7	9.4	---	9.1

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

in optometry was an 18-year-old white man coming from a socioeconomic background that was very similar to that of the entire 1974 freshman class but somewhat lower than that reported by aspiring physicians or dentists. Since 1966, increasingly larger numbers of women have become interested in optometry as a career option; these women tended to come from slightly less affluent and less educated backgrounds than did their male counterparts. Blacks and other racial/ethnic minority-group members still constituted only a tiny fraction of the freshmen aspiring to become optometrists.

College Finances

As was mentioned earlier, the proportion of freshmen claiming financial independence from their parents has steadily increased as a result of court decisions ruling that parents are not necessarily required to contribute toward the college education of children who have reached the age of majority, which is 18 in most states. By claiming financial independence, many students who would otherwise not be considered can become eligible for federal student aid programs.

In 1974, 18.2 percent of freshmen-in-general and 16.6 percent of aspiring optometrists claimed financial independence (Table V-12)

Table V-12

Financial Independence from Parents, by Race and Sex--1974 Aspiring Optometrists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Financial independence THIS year:									
No	87.9	---	88.3	72.0	---	72.8	82.9	---	83.4
Yes	12.1	---	11.7	28.0	---	27.2	17.1	---	16.6
Financial independence LAST year:									
No	90.4	---	90.7	87.4	---	87.3	89.4	---	89.7
Yes	9.6	---	9.3	12.7	---	12.7	10.6	---	10.3

Women, who tended to come from less affluent backgrounds, were considerably more likely than were men to be financially independent (27.2 percent versus 11.7 percent). Indeed, larger proportions of nonblack women planning to become optometrists than of any other group of women (including female freshmen-in-general) said they were financially independent of their parents. About equal proportions (three-fourths) were expecting financial support from their parents for the first year of college (Table V-13). Yet the figure for women was much higher among freshmen-in-general (83.9 percent); thus, female aspiring optometrists were somewhat more likely to be responsible for paying their own way than were female freshmen-in-general. Further, of the aspiring optometrists receiving parental

Table V-13

Anticipated Sources and Amounts of Financial Support for First Year of College, by Race and Sex--1974 Aspiring Optometrists

		Men			Women			Total		
		Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Parental, or family aid or gifts	%	75.0	---	75.7	76.3	---	76.0	75.4	---	75.5
	(Medn.)	$1,027	---	$1,041	$810	---	$806	$957	---	$962
Basic Educational Opportunity Grants	%	14.6	---	15.5	11.0	---	12.3	14.6	---	14.5
	(Medn.)	$481	---	$555	$302	---	$333	$418	---	$456
Supplemental Educational Opportunity Grants	%	3.5	---	4.9	.3	---	2.0	2.6	---	4.0
	(Medn.)	$335	---	$482	$333	---	$416	$347	---	$335
College Work Study grant	%	3.6	---	4.0	9.0	---	9.9	5.2	---	5.8
	(Medn.)	$352	---	$369	$640	---	$662	$512	---	$535
State scholarship or grant	%	12.3	---	12.9	9.7	---	9.5	11.5	---	11.8
	(Medn.)	$548	---	$546	$360	---	$356	$473	---	$472
Local or private scholarship or grant	%	15.6	---	15.6	9.3	---	9.9	13.7	---	13.9
	(Medn.)	$321	---	$319	$580	---	$610	$354	---	$357
Federal Guaranteed Student Loan	%	6.1	---	6.2	10.6	---	10.7	7.5	---	7.6
	(Medn.)	$1,407	---	$1,376	$580	---	$569	$1,111	---	$1,047
National Direct Student Loan	%	5.4	---	5.5	1.3	---	1.7	4.1	---	4.4
	(Medn.)	$891	---	$884	$499	---	$650	$860	---	$848
Other loan	%	3.7	---	3.6	10.0	---	10.0	5.6	---	5.6
	(Medn.)	$823	---	$820	$1,301	---	$1,263	$1,052	---	$1,010
Full-time work	%	8.1	---	7.8	2.2	---	2.1	6.3	---	6.1
	(Medn.)	$465	---	$463	$616	---	$616	$481	---	$481
Part-time or summer work	%	56.0	---	55.6	54.5	---	54.1	55.6	---	55.1
	(Medn.)	$512	---	$498	$351	---	$349	$449	---	$440
Savings	%	46.6	---	47.1	59.6	---	57.1	50.6	---	50.3
	(Medn.)	$429	---	$416	$363	---	$363	$403	---	$395
Spouse	%	.3	---	.3	2.2	---	2.1	.8	---	.8
	(Medn.)	$3,000	---	$3,000	$250	---	$250	$307	---	$307
Your G.I. benefits	%	1.5	---	1.4	.0	---	.0	1.0	---	1.0
	(Medn.)	$999	---	$999	---	---	---	$999	---	$999
Your parent's G.I. benefits	%	1.0	---	.9	.0	---	.0	.7	---	.6
	(Medn.)	$824	---	$824	---	---	---	$824	---	$824
Social security dependent's benefits	%	5.3	---	5.3	1.5	---	1.4	4.1	---	4.1
	(Medn.)	$354	---	$348	$700	---	$700	$388	---	$380
Other	%	2.1	---	2.1	.2	---	.7	1.5	---	1.6
	(Medn.)	$444	---	$444	$250	---	$650	$428	---	$463

support, women expected, on the average, $235 less than did men. The proportion of parental income to be spent for educational expenses was about the same for both sexes (6.4 percent for men and 6.1 percent for women), indicating that the lower socioeconomic status of women accounts for the smaller amount in parental support.

Despite their less affluent backgrounds, the women among aspiring optometrists were less likely to participate in BEOG or SEOG programs or to receive state and local/private scholarships, and--except for the last category--expected to get smaller amounts from these sources. Women were more likely than were men to participate in the College Work-Study program or to take a Federal Guaranteed Student Loan or borrow from some other source, or to draw on their own savings. Similar proportions of men and women (over half) expected to work part time or in the summer to finance their first year of college.

As a total group, aspiring optometrists were somewhat less likely than were all freshmen to receive funds from federal student aid programs, state scholarships, and local/private scholarships. They were also less likely to rely on part-time or summer employment or on their savings. Since their socioeconomic background was no better than that of freshmen-in-general, and since they did not seem to benefit from various aid programs as much as did others, one would expect aspiring optometrists to express greater concern over their ability to finance their college education. Yet only 10.2 percent of aspiring optometrists, compared with 14.7 percent of the total freshman class, admitted to feeling major concern about their financial situation. Even more surprisingly, the women, who came from markedly lower income levels and were much more likely to claim financial independence, tended to be less concerned about college finances than were either the men or the women aspiring to other health professions (Table V-14).

Table V-14

Concern Over Financing College Education, by Race and Sex--1974, 1972, and 1966 Aspiring Optometrists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
No concern	36.6	---	37.0	39.2	---	38.1	37.4	---	37.4
Some concern	52.0	---	50.8	55.1	---	56.1	52.9	---	52.5
Major concern	11.5	---	12.2	5.7	---	5.8	9.7	---	10.2
1972:									
No concern	88.3	---	31.3	11.3	---	27.0	31.4	---	30.7
Some concern	52.0	---	51.5	55.5	---	57.2	52.5	---	52.3
Major concern	16.3	---	17.2	15.7	---	15.9	16.2	---	17.0
1966:									
No concern	30.5	---	31.6	---	---	---	30.1	---	30.3
Some concern	65.0	---	63.9	---	---	---	63.7	---	61.4
Major concern	4.6	---	4.5	---	---	---	6.2	---	8.3

Aspiring optometrists differed from freshmen-in-general also in terms of their changing attitudes toward college finances over the years. As the cost of college attendance has steadily increased, so has the proportion of freshmen worrying over their finances. But fewer aspiring optometrists were concerned over their finances in 1974 than in 1972. As is to be expected, however, the most concerned were those students coming from lower income groups, particularly women (Figure V-2 and V-3).

FIGURE V-2

Proportion Reporting Major Concern Over Financing College Education by Sex, Race, and by Parental Income--1974 Aspiring Optometrists

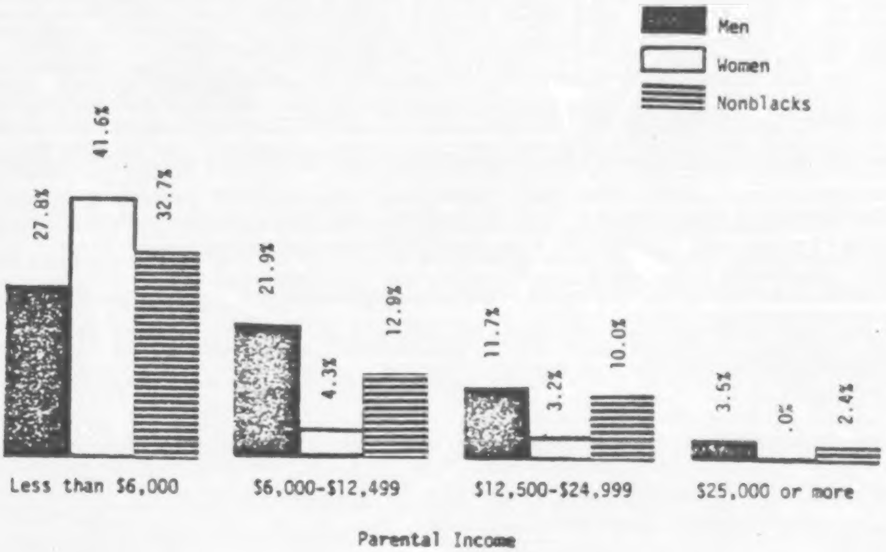
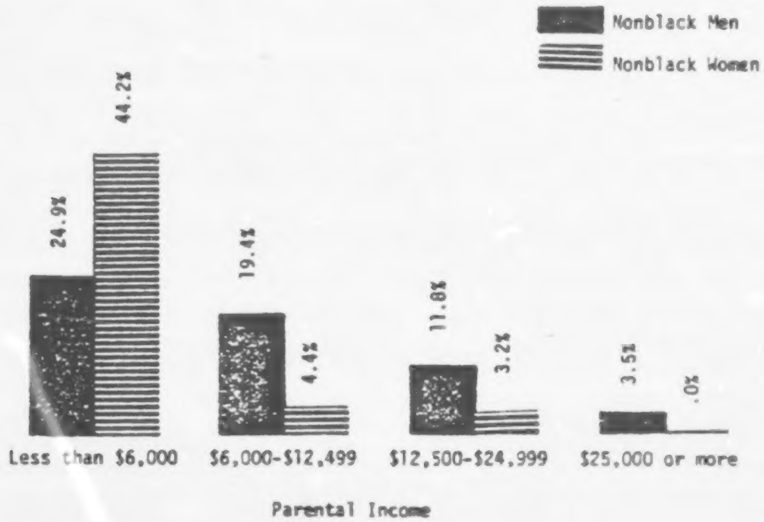


FIGURE V-3

Proportion Reporting Major Concern Over Financing College Education by Sex, by Race, and by Parental Income--1974 Aspiring Optometrists



Self-Ratings

As was true of other students planning careers in the health professions, larger proportions of aspiring optometrists than of freshmen-in-general rated themselves as above average or in the top 10 percent on a number of positive attributes, though they lacked the extreme self-confidence of aspiring physicians and dentists. For instance, one attribute that differentiated between aspiring health professionals and other freshmen was drive to achieve: 59.9 percent of all freshmen but 82.7 percent of aspiring physicians, 71.1 percent of aspiring dentists, and 67.2 percent of aspiring optometrists rated themselves high on this trait (Table V-15).

Table V-15

Self-Ratings,[a] by Race and Sex--1974 Aspiring Optometrists and All Freshmen

Trait	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Academic ability	69.1	---	68.3	39.8	---	39.7	60.1	---	59.4	53.0
Athletic ability	56.3	---	54.9	19.4	---	18.7	44.7	---	43.4	38.5
Artistic ability	17.8	---	17.6	12.8	---	13.1	16.1	---	16.2	19.5
Cheerfulness	52.2	---	51.3	59.8	---	60.1	54.6	---	54.1	52.2
Defensiveness	22.8	---	23.0	26.5	---	25.6	23.9	---	23.8	27.1
Drive to achieve	70.0	---	69.5	63.1	---	62.4	67.9	---	67.2	59.9
Leadership ability	49.7	---	48.8	35.0	---	36.3	45.0	---	44.9	41.3
Mathematical ability	57.3	---	56.3	27.7	---	27.4	47.8	---	47.0	33.4
Mechanical ability	29.2	---	28.9	19.6	---	18.8	26.2	---	25.7	23.9
Originality	39.8	---	40.2	24.7	---	25.5	35.1	---	35.5	37.4
Physical attractiveness	30.7	---	30.5	10.8	---	12.0	24.5	---	24.8	26.1
Political conservatism	12.7	---	12.3	6.1	---	6.0	10.6	---	10.3	10.5
Political liberalism	22.3	---	21.6	4.7	---	5.0	16.7	---	16.2	20.1
Popularity	47.5	---	47.2	19.5	---	19.3	38.7	---	38.2	30.2
Popularity with opposite sex	45.0	---	46.0	5.3	---	6.1	32.6	---	32.9	29.4
Public speaking ability	24.5	---	24.2	12.0	---	12.1	20.6	---	20.4	20.7
Intellectual self-confidence	51.1	---	50.4	30.7	---	32.8	44.6	---	44.8	40.7
Social self-confidence	48.9	---	48.4	20.2	---	20.5	39.9	---	39.5	33.9
Sensitivity to criticism	19.6	---	19.0	18.7	---	20.0	19.3	---	19.3	25.1
Stubbornness	31.0	---	30.5	29.7	---	29.7	30.6	---	30.2	26.9
Understanding of others	62.4	---	63.6	60.9	---	59.9	61.9	---	62.4	65.9
Writing ability	31.8	---	31.6	24.2	---	25.7	29.4	---	29.7	30.5

[a] Self-rating of "above average" or "highest 10 percent" in comparison with "the average student of your own age."

There was, however, a clear and startling sex difference: Whereas the men tended to rate themselves high on a variety of attributes--including academic ability, mathematical ability, intellectual self-confidence, leadership, popularity, popularity with the opposite sex, social self-confidence, and athletic ability--the women manifested little self-assurance relative to women aspiring to the other health professions, to female freshmen-in-general, or to their male counterparts. Only on mechanical ability did larger proportions of nonblack women planning to become optometrists than of their counterparts in other career groups consider themselves outstanding. They seemed particularly unsure of themselves socially: Only one in ten considered herself especially attractive, only one in twenty saw herself as popular with men, and only one in five rated herself as above average on social self-confidence.

Life Goals

Students were asked to indicate the priority they attached to a number of life goals. Although there was strong consensus among freshmen regarding the importance of many of the life goals (e.g., helping others in difficulty), some interesting differences emerged to distinguish between aspiring health professionals and freshmen-in-general as well as among the groups interested in different health profession careers.

The three most important life goals for aspiring optometrists were succeeding in business (67.1 percent versus 37.9 percent of all freshmen), helping others in difficulty (65.7 percent versus

61.3 percent of all freshmen, but 81.9 percent of aspiring physicians), and becoming an authority in one's field (60.2 percent versus 62.2 percent of all freshmen) (Table V-16).

Table V-16

Life Goals,[a] by Race and Sex--1974 Aspiring Optometrists and All Freshmen

Life Goal	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Becoming accomplished in one of the performing arts (acting, dancing, etc.	10.0	---	10.2	6.0	---	6.2	8.7	---	8.9	11.4
Becoming an authority in my field	69.4	---	68.6	43.5	---	43.2	60.9	---	60.2	62.2
Obtaining recognition from my colleagues for contributions to my special field	52.0	---	51.1	25.7	---	27.9	43.6	---	43.6	39.0
Influencing the political structure	12.7	---	12.4	11.8	---	11.5	12.4	---	12.1	12.5
Influencing social values	24.5	---	24.2	27.2	---	27.2	25.4	---	25.1	27.2
Raising a family	54.8	---	54.5	65.3	---	63.8	58.2	---	57.5	55.0
Having administrative responsibility for the work of others	24.8	---	24.5	14.7	---	15.5	21.6	---	21.6	25.6
Being very well-off financially	63.6	---	63.0	38.2	---	37.7	55.4	---	54.7	45.8
Helping others who are in difficulty	57.8	---	57.3	84.2	---	83.2	66.2	---	65.7	61.3
Making a theoretical contribution to science	23.4	---	23.9	7.2	---	7.4	18.1	---	18.5	13.0
Writing original works (poems, novels, short stories, etc.)	8.4	---	9.7	8.1	---	8.0	8.3	---	9.2	11.9
Creating artistic work (painting, sculpture, decorating, etc.)	6.5	---	6.2	6.7	---	7.1	6.6	---	6.6	13.9
Being successful in a business of my own	79.5	---	79.5	41.4	---	41.4	67.2	---	67.1	37.9
Becoming involved in programs to clean up the environment	23.1	---	25.8	23.5	---	18.9	24.4	---	23.5	25.9
Developing a meaningful philosophy of life	63.2	---	64.5	58.1	---	56.6	61.6	---	61.9	61.1
Participating in a community action program	34.5	---	33.3	34.6	---	34.5	34.5	---	33.7	27.5
Keeping up to date with political affairs	36.4	---	35.7	20.0	---	19.7	30.9	---	30.3	36.6

[a] Life goals rated as "very important" or "essential."

Raising a family was considered to be a very important or essential life goal by 63.8 percent of the women and 54.5 percent of the men among aspiring optometrists. Interestingly, only 43.7 percent of the female aspiring physicians endorsed this as a very important life goal; evidently, women interested in optometry had more traditional views than did women interested in medicine.

Being very well-off financially was a major life goal to 54.7 percent of aspiring optometrists but only 45.8 percent of all freshmen; however, aspiring optometrists were less concerned with financial success than were aspiring dentists, 62.2 percent of whom rated this as a very important or essential life goal.

Recognition from colleagues was important to 43.6 percent of aspiring optometrists but 39 percent of all freshmen. There was less consensus among aspiring optometrists regarding the importance of other life goals. Generally, women were much more interested than were men in altruistic goals such as helping others in difficulty (83.2 percent versus 57.3 percent), while men were more concerned with such career-oriented and instrumental goals as succeeding in business (79.5 percent versus 41.4 percent), becoming an authority in one's field (68.6 percent versus 43.2 percent), obtaining recognition from colleagues (51.1 percent versus 27.9 percent) and being very well-off financially (63 percent versus 37.7 percent). These sex differences conform to those found generally between men and women students.

Identity Groups

Asked to indicate the degree to which they identified with each of several groups, aspiring optometrists gave responses similar to those of freshmen-in-general and of other aspirants to the health professions.

Most identified with people of their own generation: 78.6 percent of aspiring optometrists and 71.7 percent of the total freshman class identified with this group "strongly" or "strongest of all" (Table V-17). Among aspiring physicians and dentists, the

Table V-17

Identity Groups, by Race and Sex--1974 Aspiring Optometrists and All Freshmen

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
People who live in my community										
Strongest of all	16.0	---	15.6	14.5	---	14.0	15.5	---	15.1	13.6
Strongly	37.8	--	37.0	33.6	---	33.0	36.5	---	35.8	28.6
Moderately	40.9	---	40.9	49.0	---	48.9	43.4	---	43.4	44.0
Little or none	5.3	---	6.4	2.9	---	4.1	4.6	---	5.7	13.8
People of my own religion										
Strongest of all	8.4	---	8.2	7.8	---	9.4	8.2	---	8.5	6.7
Strongly	14.7	---	15.6	12.2	---	12.6	13.9	---	14.6	16.1
Moderately	45.8	---	45.8	45.5	---	45.0	45.7	---	45.5	42.7
Little or none	31.1	---	30.5	34.5	---	33.1	32.1	---	31.3	34.6
People of my own sex										
Strongest of all	5.9	---	5.7	5.5	---	5.3	5.8	---	5.6	3.5
Strongly	29.8	---	31.2	43.2	---	42.1	34.0	---	34.6	32.8
Moderately	56.7	---	55.7	44.7	---	45.2	52.9	---	52.4	56.1
Little or none	7.6	---	7.4	6.5	---	7.3	7.3	---	7.4	7.5
People of my own race or ethnic group										
Strongest of all	10.4	---	12.2	6.3	---	7.0	9.1	---	10.6	8.2
Strongly	34.5	---	34.4	34.5	---	34.3	34.5	---	34.3	34.4
Moderately	48.0	---	46.5	50.2	---	49.4	48.7	---	47.4	45.5
Little or none	7.1	---	6.9	9.1	---	9.4	7.7	---	7.7	11.9
People of my own generation										
Strongest of all	33.6	---	33.1	35.3	---	34.5	34.1	---	33.5	29.1
Strongly	46.7	---	46.5	41.9	---	42.1	45.2	---	45.1	42.6
Moderately	18.9	---	19.7	19.2	---	20.1	19.0	---	19.8	25.1
Little or none	3.7	---	.7	1.0	---	1.4	1.6	---	1.6	3.1

next most often cited group was "people of my own race or ethnic group," chiefly because of the greater proportion of blacks who aspired to these professions. Among aspiring optometrists, however, the racial/ethnic identification was less strong than was the identification with "people of my own community," mentioned by half, in contrast to only 42.2 percent of all freshmen. Sex was a more important identity factor for women than for men: Nearly half the women but only 36.9 percent of men identified strongly with "people of my own sex." The group least often identified with was "people of my own religion," mentioned by only 23 percent of all students, including aspiring optometrists.

College Choice

Aspiring optometrists were less likely than were freshmen-in-general to cite low tuition as a very important factor in their choice of a particular college (19.3 percent versus 27.5 percent) (Table V-18). The availability of special educational programs was much more likely to be regarded as very important by women (54.1 percent) than by men (25.6 percent) in the aspiring optometrist group. Fewer than one in five of either aspiring optometrists or freshmen-in-general considered the availability of financial assistance to be a very important factor in college choice, but half indicated that the academic reputation of the institution was very important.

A comparison with answers given two years earlier by aspiring optometrists indicated that more women were concerned about the

Table V-18

Reasons for College Choice, by Race and Sex--1974 and 1972 Aspiring Optometrists

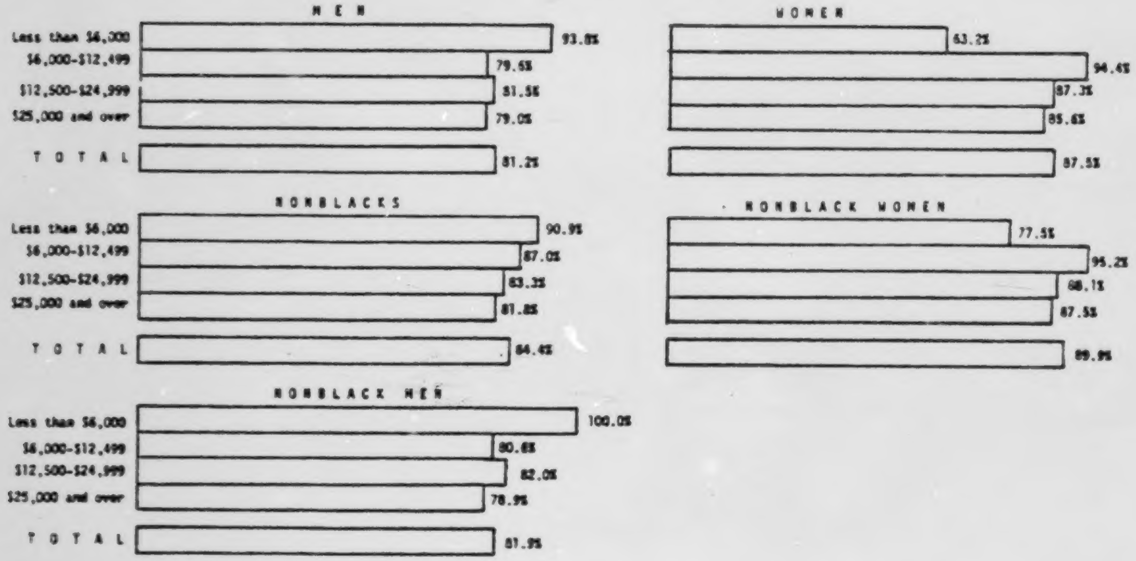
	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1 9 7 4									
Low tuition:									
Very important	19.0	---	18.6	21.4	---	20.7	19.8	---	19.3
Somewhat important	43.3	---	42.5	52.1	---	51.0	46.0	---	45.2
Not important	37.8	---	38.9	26.4	---	28.4	34.2	---	35.6
Special programs offered:									
Very important	26.2	---	25.6	54.4	---	54.1	35.0	---	34.5
Somewhat important	30.6	---	30.5	27.7	---	28.1	29.7	---	29.7
Not important	43.2	---	43.9	18.0	---	17.8	35.3	---	35.8
Offered financial assistance:									
Very important	18.1	---	18.5	16.6	---	17.8	17.6	---	18.3
Somewhat important	14.2	---	14.8	15.6	---	15.1	14.6	---	14.9
Not important	67.8	---	66.8	67.9	---	67.1	67.8	---	66.9
Very good academic reputation:									
Very important	50.5	---	50.5	46.0	---	47.4	49.1	---	49.6
Somewhat important	38.7	---	38.7	44.6	---	43.6	40.6	---	40.2
Not important	10.8	---	10.8	9.4	---	9.0	10.4	---	10.2
1 9 7 2									
Low tuition:									
Very important	20.9	---	20.6	25.6	---	24.5	21.5	---	21.1
Somewhat important	32.7	---	32.7	25.3	---	26.1	31.7	---	31.8
Not important	46.5	---	46.8	49.1	---	49.4	46.8	---	47.1
Special programs offered:									
Very important	26.8	---	26.4	30.5	---	31.1	27.3	---	27.0
Somewhat important	24.3	---	24.5	41.5	---	40.9	26.5	---	26.6
Not important	48.9	---	49.1	28.1	---	28.0	46.2	---	46.4
Offered financial assistance:									
Very important	11.7	---	12.0	8.1	---	7.8	11.2	---	11.5
Somewhat important	13.2	---	13.5	12.4	---	13.7	13.1	---	13.5
Not important	75.2	---	74.5	79.5	---	78.5	75.7	---	75.0
Very good academic reputation:									
Very important	44.6	---	45.2	63.5	---	63.2	47.0	---	47.6
Somewhat important	38.7	---	38.2	27.7	---	28.4	37.3	---	36.9
Not important	16.6	---	16.6	8.9	---	8.5	15.7	---	15.6

availability of special programs and about low tuition in 1974 than in 1972. Further, the proportion of women who stated that the offer of financial assistance was very important to their choice of a college more than doubled.

In 1974, 77.5 percent of all freshmen enrolled in public colleges and universities. Aspiring physicians and dentists were more likely to enroll in private colleges and universities than were freshmen-in-general, while the opposite was true for aspiring optometrists (Figure V-4).

FIGURE V-4

Proportion Enrolled in Public Institutions, by Race and Sex--1974 Aspiring Optometrists



Generally, students from lower-income backgrounds were more likely to enroll in public than in private institutions. Among aspiring optometrists, 93.8 percent of the men with parental incomes less than $6,000 but 79 percent of those with parental incomes above $25,000 were enrolled in public institutions. Interestingly, the proportion of nonblack male aspiring physicians from such affluent backgrounds who were enrolled in public institutions was only 43.5 percent.

Women were more likely than were men to enroll in public institutions (87.5 percent versus 81.2 percent), except for those in the lowest income category. Except for the lowest, women from higher income families were less likely to enroll in the public sector than were women from less affluent backgrounds.

As was the case with other aspiring health professionals, aspiring optometrists were more likely than were freshmen-in-general to be enrolled in universities: 32.9 percent of aspiring optometrists but 24 percent of all freshmen were enrolled in universities in 1974. The proportion of aspiring optometrists enrolled in two-year colleges was very similar to that of freshmen-in-general (41 percent), whereas more freshmen-in-general than aspiring optometrists entered four-year colleges (35 percent versus 26.5 percent).

Among aspiring optometrists, men were much more likely than were women to be enrolled in universities (40.3 percent versus 16.9 percent) while the opposite was true for two-year colleges (29.2 percent versus 65.5 percent) (Figure V-5). Attendance patterns differed also by income: Men from the highest income category (i.e., parental income in excess of $25,000) were most likely to be enrolled in universities and least likely to be enrolled in two-year colleges. Women from the highest income group were less likely to be enrolled in universities than were those from the next highest group (16.3 percent versus 32.6 percent), while virtually none from the lowest income group enrolled in a university (Figures V-6 and V-7).

FIGURE V-5

Institutional Attendance Patterns for 1974, 1972, and 1966
Aspiring Optometrists, by Race and Sex

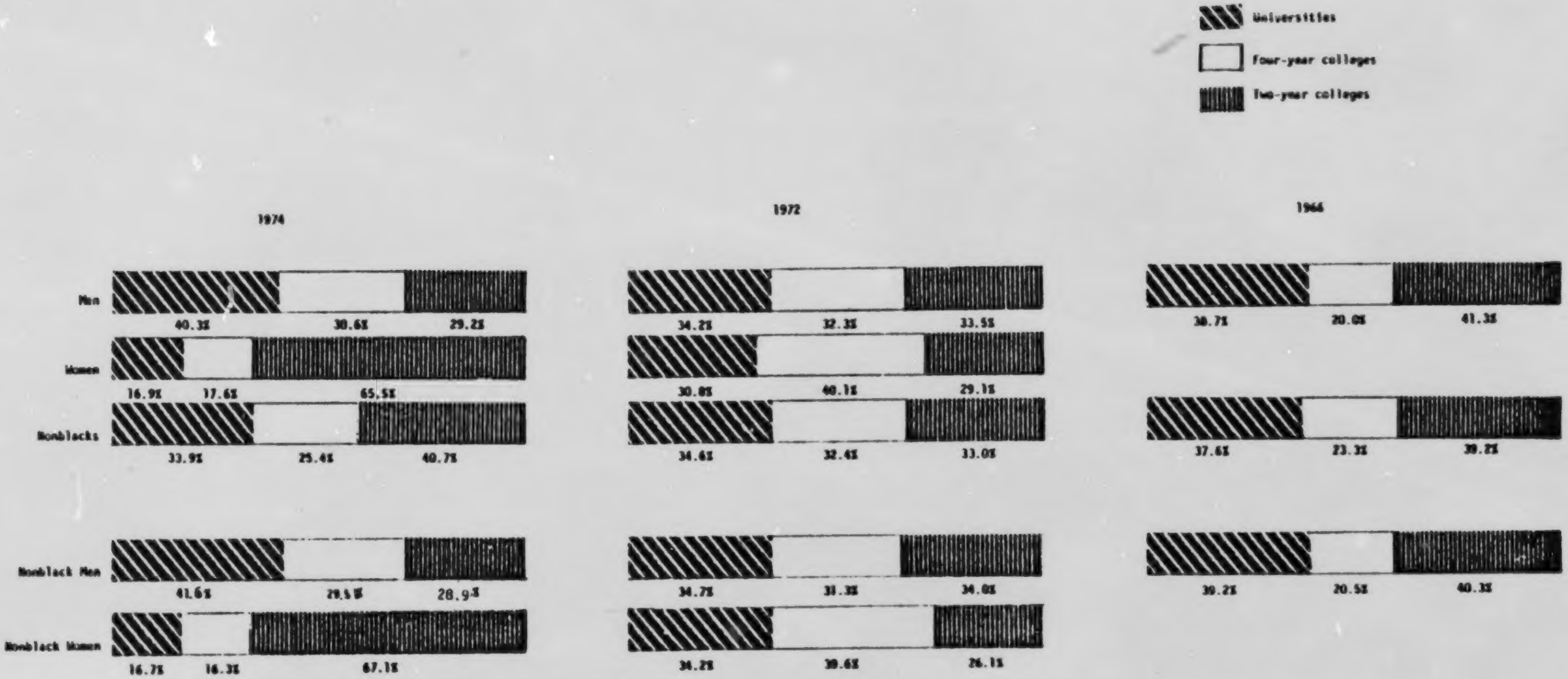


FIGURE V-6

Institutional Attendance Patterns for 1974 and 1972 Aspiring Optometrists, by Sex, by Race, and by Parental Income

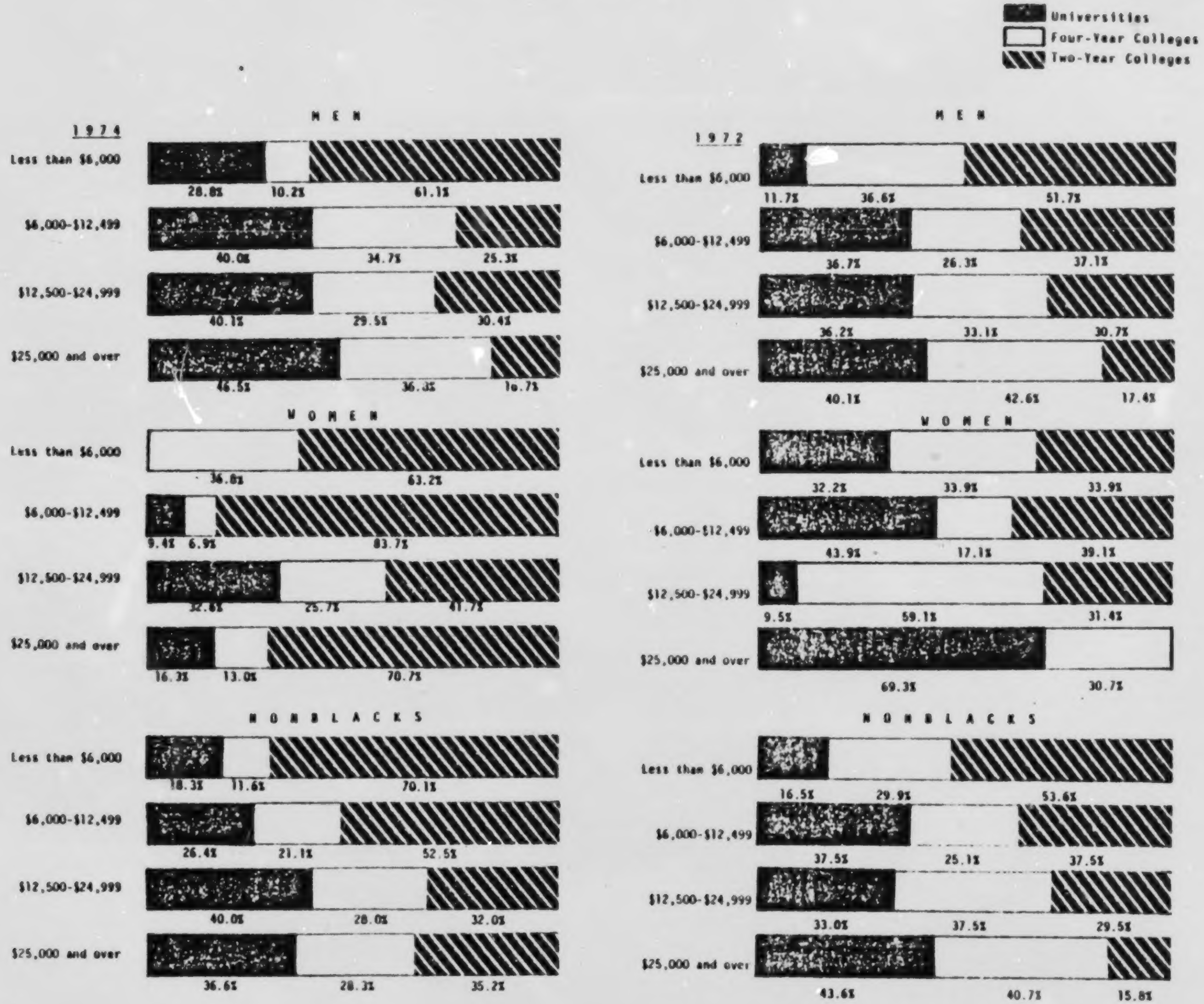
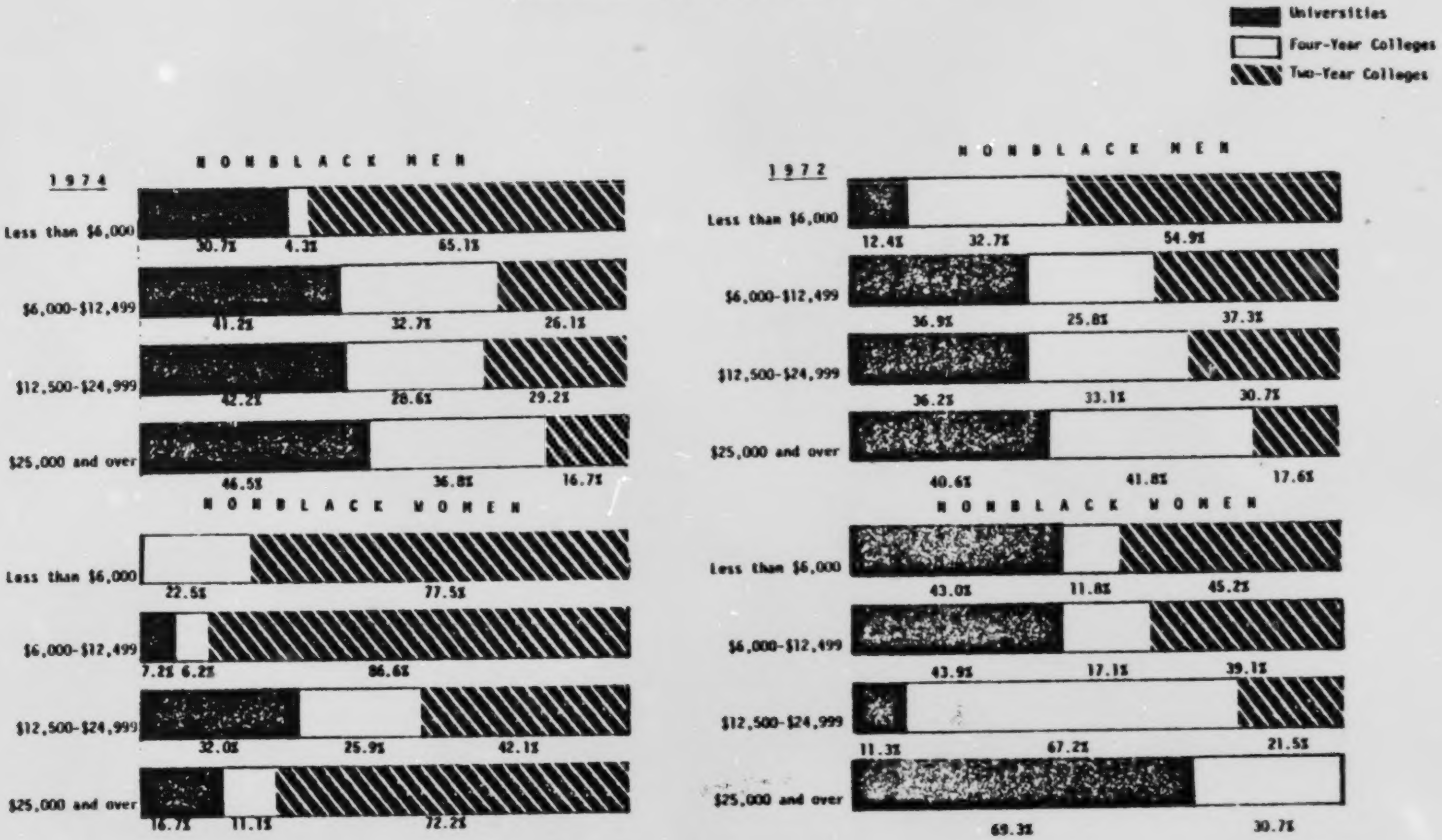


FIGURE V-7

Institutional Attendance Patterns for 1974 and 1972 Aspiring Optometrists, by Race and Sex, and by Parental Income



Due to the rapid expansion of the two-year college sector, the distribution of students changed over the eight-year period studied. Larger proportions of students are now enrolling in two-year colleges than ever before (41 percent of all entering freshmen in 1974, in contrast to 24.9 percent in 1966). But just the opposite has occurred among students choosing optometry as a career; that is, smaller proportions were enrolled in two-year colleges in 1974 than in 1966.

Study Field Choice

Whatever type of institution they enrolled in, a great majority of aspiring optometrists planned to major in one of the health-related study fields (Table V-19). The two out of three

Table V-19

Probable Study Field Major, by Race and Sex and by Institutional Type—1974 Aspiring Optometrists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University:									
Biological sciences	13.7		13.7	12.5	—	11.7	13.5		8.9
Health technology	23.5	—	23.6	8.2	—	7.7	21.1	—	20.9
Nursing	—	—	—	13.8	—	17.8	2.2		3.2
Pharmacy	—	—	—	—	—	—	—	—	—
Therapy	—	—	—	1.4	—	1.3	.2	—	.2
Other health fields	47.9	—	47.9	51.6	—	48.2	48.5	—	47.9
Total health fields	85.2	—	85.2	87.5	—	86.7	85.5	—	80.9
Total nonhealth fields	14.8	—	14.8	12.5	—	13.3	14.5	—	19.1
Four-Year Colleges:									
Biological sciences	26.8	—	25.6	5.3	—	4.8	22.6	—	19.5
Health technology	17.7	—	16.9	4.6	—	4.2	16.1	—	14.3
Nursing	—	—	—	30.2	—	27.7	5.9	—	5.6
Pharmacy	.9	—	.9	—	—	—	.7	—	.7
Therapy	—	—	—	—	—	—	—	—	—
Other health fields	41.6	—	41.7	55.8	—	59.5	44.4	—	48.3
Total health fields	87.0	—	85.1	95.9	—	96.2	88.7	—	85.4
Total nonhealth fields	13.6	—	14.9	4.1	—	3.8	11.3	—	14.6
Two-Year Colleges:									
Biological sciences	13.3	—	13.3	3.9	—	3.8	8.2	—	8.0
Health technology	9.7	—	9.7	48.1	—	46.7	30.6	—	30.1
Nursing	—	—	—	31.7	—	33.7	17.2	—	18.6
Pharmacy	—	—	—	—	—	—	—	—	—
Therapy	—	—	—	—	—	—	—	—	—
Other health fields	64.4	—	64.4	12.3	—	11.6	35.9	—	38.3
Total health fields	87.4	—	87.4	95.7	—	95.8	91.9	—	92.0
Total nonhealth fields	12.6	—	12.6	4.3	—	4.2	8.1	—	8.0

female aspiring optometrists enrolled in two-year colleges were much more likely to plan to major in health technology (46.7 percent) than were women enrolled in universities (7.7 percent) or in four-year colleges (4.2 percent); 48.2 percent of university entrants and 59.5 percent of four-year college entrants named other health fields as their probable major. One-third of the women in two-year colleges, 27.7 percent of those in four-year colleges, and 17.8 percent of those in universities were interested in nursing as a major. Moreover, although they said that they planned to become optometrists, a great majority of the women in two-year colleges were not interested in obtaining a medical degree or even a baccalaureate (Table V-20), nor did they plan to transfer

Table V-20

Degree Plans, by Race and Sex, and by Type of Institution--1974 Aspiring Optometrists

1974 Degree Plans	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Universities									
Bachelor's	10.4	---	10.4	4.4	---	5.7	9.[illegible]	---	9.7
Master's	6.4	---	6.4	4.4	---	8.1	6.1	---	6.7
Ph.D. or Ed.D.	12.0	---	12.0	8.3	---	7.7	11.5	---	11.4
Medical degree	64.9	---	64.9	73.9	---	70.1	66.1	---	68.6
Other	6.3	---	6.3	9.0	---	8.4	6.7	---	6.6
Four-Year Colleges									
Bachelor's	2.3	---	3.2	6.1	---	8.7	2.9	---	4.2
Master's	3.4	---	3.2	10.5	---	12.4	4.6	---	4.8
Ph.D. or Ed.D.	12.4	---	13.1	3.4	---	4.7	11.0	---	11.6
Medical degree	73.0	---	72.2	63.9	---	60.6	71.5	---	70.1
Other	8.9	---	8.3	16.1	---	13.6	10.0	---	9.3
Two-Year Colleges									
Bachelor's	14.5	---	14.5	4.6	---	4.4	9.9	---	9.8
Master's	7.8	---	7.8	2.9	---	2.8	5.5	---	5.4
Ph.D. or Ed.D.	.0	---	.0	.0	---	.0	.0	---	.0
Medical degree	71.0	---	71.0	.7	---	.7	38.5	---	37.9
Other	6.7	---	6.7	91.6	---	92.1	46.1	---	46.9

to another school (Table V-21). Thus, it is highly likely that many of these women will not be able to actualize their freshman career plans. In contrast, the degree as well as the transfer plans of men were much more consistent with their career plans.

Table V-21

Proportion Likely to Transfer to Another College,[a] by Race and Sex and by Institutional Type--1974 Aspiring Optometrists

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University	55.4	---	55.4	43.0	---	43.3	53.6	---	53.5
Four-year college	58.6	---	59.4	72.5	---	69.5	61.4	---	61.4
Two-year college	37.6	---	41.1	7.5	---	7.3	20.1	---	21.7

[a] Proportion indicating that there was "some chance" or "a very good chance" that they would transfer to another college before graduating.

Career Choice

In indicating the "very important" reasons for their choice of a career, aspiring optometrists were less likely than were freshmen-in-general to cite their ability to work with ideas (19 percent versus 44.1 percent) or their intrinsic interest in the field (61.4 percent versus 67.4 percent), but they were more likely to mention such altruistic considerations as the ability to work with people (70.1 percent versus 61.3 percent), to help people (75.2 percent versus 61.8 percent), and to contribute to society (53.4 percent versus 47.2 percent) (Table V-22). On the other hand, aspiring optometrists were also more likely than were freshmen-in-general to cite the importance of such economic and instrumental considerations as the availability of job openings (52.3 percent versus 46.8 percent) and high expected earnings

(48.5 percent versus 41.7 percent). The independence or autonomy offered by the profession was important to 54 percent of aspiring optometrists but to only two-fifths of all freshmen.

Table V-22

Reasons[a] for Career Choice, by Race and Sex--1974 Aspiring Optometrists

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Job openings generally available	47.0	---	46.6	64.5	---	64.1	52.6	---	52.3	46.8
Rapid career advancement possible	32.9	---	32.7	22.9	---	22.5	29.7	---	29.4	34.8
High anticipated earnings	59.9	---	59.0	25.7	---	26.2	49.0	---	48.5	41.7
Well-respected or prestigious occupation	51.5	---	50.8	30.2	---	31.1	44.7	---	44.5	32.2
Great deal of independence	67.3	---	66.1	27.9	---	28.4	54.7	---	54.0	41.1
Chance for steady progress	43.6	---	42.6	21.8	---	22.4	[illegible]	---	36.0	48.7
Can make an important contribution to society	54.4	---	54.2	50.8	---	51.7	53.2	---	53.4	47.2
Can avoid pressure	20.7	---	20.3	15.0	---	15.0	18.8	---	18.6	17.0
Can work with ideas	19.5	---	19.6	16.8	---	17.6	18.6	---	19.0	44.1
Can be helpful to others	72.7	---	71.6	81.5	---	82.4	75.6	---	75.2	61.8
Able to work with people	66.1	---	65.1	80.3	---	80.7	70.6	---	70.1	61.3
Intrinsic interest in the field	61.9	---	61.0	64.4	---	64.5	62.7	---	61.4	67.4

[a] Reason indicated as "very important."

In choosing a career, women, as usual, had more altruistic concerns than did men: 82.4 percent of the women but 71.6 percent of the men stressed the importance of helping people; 80.7 percent of the women but 65.1 percent of the men cited chance to work with people. It should be noted that women were also very much attracted by the availability of jobs (64.1 percent of women versus 46.6 percent of men), and that this factor was particularly important for women coming from families with incomes of less than $6,000 (Table V-23). Men were much more interested than were women in high anticipated earnings (59 percent versus 26.2 percent) and in autonomy (66.1 percent versus 28.4 percent).

Summary

In summary, the typical student who, at college entry, expressed

Table 9-23

Reasons[a] for Career Choice, by Race, by Sex, and by Income Level--1974 Aspiring Optometrists

	Men	Women	Nonblacks	Blacks
Job openings generally available:				
Less than $6,000	38.0	91.5	67.9	99.5
$6,000 - $12,499	52.3	67.4	58.2	60.0
$12,500 - $24,999	49.5	53.8	51.6	17.1
$25,000 and over	41.5	73.8	52.5	100.0
Rapid career advancement possible:				
Less than $6,000	40.9	4.4	18.5	38.2
$6,000 - $12,499	24.2	14.9	19.8	22.1
$12,500 - $24,999	35.3	39.0	37.0	12.0
$25,000 and over	34.7	23.4	30.9	.0
High anticipated earnings:				
Less than $6,000	34.2	19.1	21.7	62.0
$6,000 - $12,499	51.4	23.3	38.2	88.4
$12,500 - $24,999	61.1	29.6	56.9	12.0
$25,000 and over	67.3	28.8	54.0	.0
Well-respected or prestigious occupation:				
Less than $6,000	43.4	43.8	37.8	78.8
$6,000 - $12,499	53.8	40.0	46.9	63.8
$12,500 - $24,999	51.0	21.7	46.0	12.0
$25,000 and over	57.8	26.3	47.4	.0
Great deal of independence:				
Less than $6,000	59.3	30.1	62.7	37.7
$6,000 - $12,499	67.8	31.6	52.4	24.0
$12,500 - $24,999	66.5	27.4	58.3	34.6
$25,000 and over	74.0	16.3	54.0	.0
Chance for steady progress:				
Less than $6,000	26.1	15.1	17.3	37.7
$6,000 - $12,499	36.1	24.0	31.1	13.2
$12,500 - $24,999	44.6	25.9	41.5	17.1
$25,000 and over	45.7	13.0	34.3	.0
Can make an important contribution to society:				
Less than $6,000	76.8	63.5	68.2	78.8
$6,000 - $12,499	90.0	37.6	67.6	77.9
$12,500 - $24,999	47.3	79.2	48.0	34.6
$25,000 and over	72.1	75.5	73.1	100.0
Can avoid pressure:				
Less than $6,000	4.6	30.9	27.2	11.1
$6,000 - $12,499	20.1	2.5	12.0	10.8
$12,500 - $24,999	18.1	24.2	19.7	12.0
$25,000 and over	30.1	17.5	25.9	.0
Can work with ideas:				
Less than $6,000	6.7	20.4	8.2	49.3
$6,000 - $12,499	21.1	6.5	13.7	35.6
$12,500 - $24,999	18.3	25.3	19.7	22.5
$25,000 and over	20.0	25.9	22.2	.0
Can be helpful to others:				
Less than $6,000	91.4	100.0	98.3	100.0
$6,000 - $12,499	77.8	79.6	79.6	92.4
$12,500 - $24,999	67.1	68.8	69.5	29.6
$25,000 and over	70.3	94.1	78.6	100.0
Able to work with people:				
Less than $6,000	73.9	100.0	86.9	100.0
$6,000 - $12,499	69.2	78.8	74.7	35.6
$12,500 - $24,999	64.5	80.0	64.6	30.6
$25,000 and over	68.9	97.0	73.6	100.0
Intrinsic interest in the field:				
Less than $6,000	89.2	83.2	88.4	78.8
$6,000 - $12,499	84.7	90.6	88.6	92.4
$12,500 - $24,999	97.3	81.8	90.1	34.8
$25,000 and over	94.6	72.6	90.2	.0

[a] Reason indicated as "very important."

an interest in becoming an optometrist was an 18-year-old white man whose socioeconomic background was very similar to that of most freshmen but somewhat lower than that of aspiring physicians and dentists. The typical aspiring optometrist expected to get financial help from his parents to pay for his college education, did not participate much in student aid programs, yet showed little concern over his finances. He had a positive image of himself although he was much more modest in describing his qualities and capabilities than were aspiring physicians or dentists. He was interested in helping others as well as in getting ahead in his career.

Although the proportion of women interested in optometry has increased considerably since 1966, women still constituted a minority. Women interested in optometry came from slightly less affluent and less educated backgrounds than did men and had a much less favorable self-image, lacking confidence in their intellectual abilities and--more notably--in their social skills. They were more interested in altruistic life goals than were men and seemed to reflect more traditional values than did women interested in medicine.

Finally, it seems that the men have a better chance of achieving their freshman career goals in that their institutional attendance patterns, study field plans, and degree aspirations, as well as the transfer plans of those entering two-year colleges, were more consistent with their career goals. In contrast, two-thirds of the women initially enrolled in two-year colleges reported having no intention of getting a medical degree or even the baccalaureate. Thus, these women are likely candidates for failure in attaining freshman career aspirations.

CHAPTER VI - ASPIRING VETERINARIANS

HIGHLIGHTS

- In the fall of 1974, 24,027 first-time, full-time freshmen (1.4 percent of the total entering class) named veterinary medicine as their career choice. This represents an increase of 93.8 percent over 1966 in the number of aspiring veterinarians. The increase was greatest among women (287.6 percent) and blacks (122.8 percent); the number of nonblack men increased only modestly (27.8 percent). Nonetheless, veterinary medicine as a career choice remained predominantly white, with black women constituting only 1.2 percent and black men only 1 percent of the total group in 1974. Over the eight-year period, however, the sex distribution changed: In 1966, men outnumbered women by three to one; in 1974, women had a slight edge over men: 50.8 percent versus 49.2 percent. Thus, it is impossible to talk about a "typical" aspiring veterinarian.

- Nonblack women planning to become veterinarians came from slightly higher than average socioeconomic backgrounds, expected to receive substantial support from their parents as well as from part-time or summer jobs, and were apt to express at least some concern over paying for college. Like other aspiring health professionals, they rated themselves high on academic ability and drive to achieve; moreover, relatively large proportions saw themselves as stubborn, athletic, and artistic. But they lacked confidence in their interpersonal skills. While emphasizing such life goals as making a theoretical contribution to science, becoming an authority in their field, and succeeding in their own business, they were less likely than were other women to value helping others, raising a family, influencing social values, and participating in community action programs. Their somewhat asocial tendencies are reflected in the small proportion who cited ability to work with people as a very important factor in their career choice. Other factors mentioned infrequently were rapid advancement, high earnings, and the prestige of the profession. But they were more likely than were others to mention intrinsic interest in the field and the opportunity for independence. Two-fifths enrolled in two-year institutions, but only one in three of these planned to transfer, making it doubtful that they will reach their career goals. Another two-fifths enrolled in universities; they and the four-year college enrollees had degree and study field plans consistent with their freshman career goals.

- In socioeconomic status, nonblack men planning to become veterinarians resembled their female counterparts, except that their mothers were more likely to be college educated and their fathers to be farmers. Relative to nonblack men aspiring to other health professions, a fairly large proportion expected to rely on federal programs (College Work-Study, BEOG) and on full-time employment to finance their college education, and expressed major concern over their ability to pay for college. Like the nonblack women, they rated themselves high on academic ability and drive to achieve but low on interpersonal skills. In addition to achievement goals, they gave high priority to cleaning up the environment and they cited not only intrinsic interest and the chance for independence but also high earnings as important factors in their career choice. Their enrollment patterns and educational aspirations and plans resembled those of the nonblack women, except that the men enrolling in two-year colleges were much more likely to plan on transferring to another institution.

- Blacks planning to become veterinarians reported higher median parental incomes than blacks aspiring to other health professions and were somewhat more likely to have mothers with advanced degrees who worked in a nonhealth profession. They expected little financial support from their parents and were more likely than others to rely on state scholarships, full-time employment, and federal loans. Three in ten were worried about being able to pay for college. Their self-ratings and life goals paralleled those of their nonblack counterparts except that they were more likely to emphasize influencing the political structure and social values, keeping up-to-date with politics, being very well-off financially, and achieving in artistic pursuits. The chance to work with ideas, to be helpful to others, to contribute to society, and to make steady progress were their chief reasons for choosing veterinary medicine. Over half enrolled in four-year colleges, a category that includes most predominantly black institutions. Except for the one-fourth who enrolled in two-year colleges, their degree and study field plans seemed congruent with their career goals.

General Characteristics

In the fall of 1974, 24,027 first-time, full-time freshmen (1.4 percent of the total class) named veterinary medicine as their probable future career. This group, hereafter referred to as aspiring veterinarians for convenience, is described in the following pages, and, where appropriate, is compared with similar groups of students who entered college in 1966 and in 1972. Further, occasional comparisons are made between 1974 aspiring veterinarians and the total group of entering freshmen, as reported in the national norms (Astin et al., 1974). Table VI-1 shows the number of aspiring veterinarians, by sex and race/ethnicity (nonblack and black), for all three freshman classes.

Table VI-1

Number of 1974, 1972, and 1966 Freshmen Aspiring to Become Veterinarians, by Race and Sex

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	11,573	252*	11,826	11,918	285*	12,203	23,491	537	24,027
1972	13,179	184*	13,366	7,992	155*	8,146	21,170	338*	21,508
1966	9,078	176*	9,254	3,082	66*	3,148	12,159	241*	12,400

*Actual numbers were too small for further analyses.

The following sections profile aspiring veterinarians in terms of their demographic and background characteristics, college finances, self-ratings, life goals, and identity groups.

Sex and Race/Ethnicity

Since 1966, veterinary medicine has gained slowly but steadily in popularity among first-time, full-time freshmen as a probable career, with 1.4 percent of the freshman class making this choice in 1974. The number of women interested in this career increased almost fourfold over the eight-year period, whereas the number of women in the total freshman class increased by one and a half over the same period.

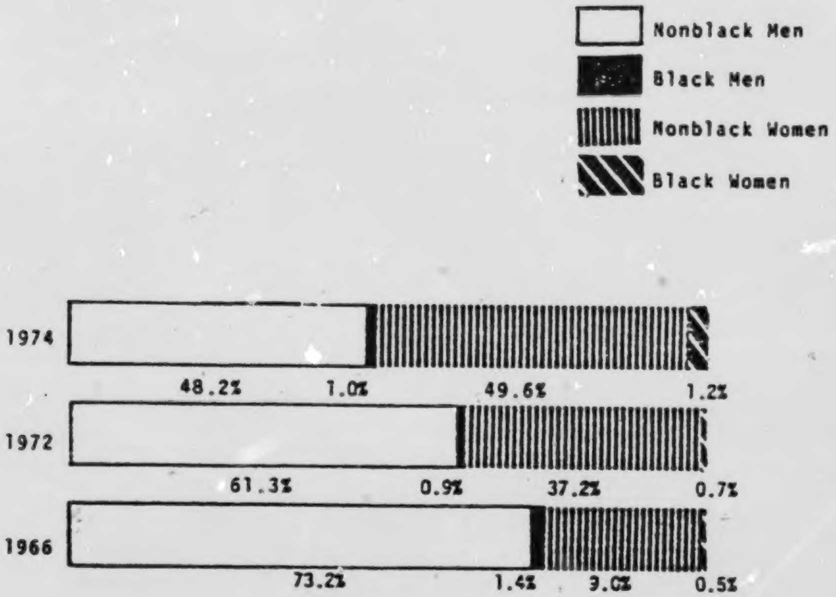
The number of blacks interested in becoming veterinarians also increased but not so dramatically. Indeed, the increase in the actual number of black aspiring veterinarians over the eight-year period was 122.8 percent, which is smaller than the increase in the number of blacks entering college. Even with this increase, however, blacks accounted for only 2.2 percent of the aspiring veterinarians in 1974 as compared with 1.9 percent in 1966.

The typical freshman who aspires to a career in one of the health professions has been and continues to be a nonblack man, though the proportion of nonblack men has dropped somewhat within each specific career choice due to the greater increases in the number of women and of blacks aspiring to those careers. For veterinary medicine, however, nonblack women outnumbered nonblack men in 1974; the absolute numbers were 11,918 nonblack women and 11,573 nonblack men (Figure VI-1). The actual number of nonblack men increased by only 27.5 percent in contrast to a 286.7 percent increase in the number of nonblack women.

About 4 percent of the aspiring veterinarians classified as

FIGURE VI-1

Race and Sex Distribution of 1966, 1972, and 1974 Freshmen Aspiring to Become Veterinarians



nonblack indicated that they belonged to a racial/ethnic minority (Table VI-2). This proportion has remained constant over the eight-year period. Of this group, 30.6 percent were "other" minority-

Table VI-2

Numbers and Distribution of Nonblack Minority Group Members Aspiring to Become Veterinarians--1974, 1972 and 1966 Freshman Classes

	1974		1972		1966	
	N	%	N	%	N	%
American Indian	237	25.1	228	30.9	91	19.9
Oriental	94	9.9	106	14.4	35	7.6
Mexican-American	211	22.3	42	5.7	---	---
Puerto Rican	114	12.1	29	3.9	---	---
Other	290	30.6	332	45.0	332	72.5
TOTAL	946	100.0	737	100.0	458	100.0

group members, 25.1 percent were American Indians, 22.3 percent were Mexican-Americans, 12.1 percent were Puerto Ricans, and 9.9 percent were Orientals.[1] Though the proportion of nonblack minority students aspiring to veterinary medicine has remained constant, the actual numbers have increased. For the most part, these increases were greater than the increase for blacks. The number of Orientals aspiring to veterinary medicine in 1974 increased 168.6 percent over the number in 1966; for American Indians, the increase was 160.4 percent; and for blacks, only 122.8 percent. The number of students in the "other" ethnic category declined by 12.7 percent.[2]

In summary, a career in veterinary medicine seems to have become an attractive option for women who wish to enter a professional health field. Though the overall proportion of first-time, full-time freshmen aspiring to careers in veterinary medicine has increased over the eight-year period, this increase is attributable primarily to the greater interest of nonblack women.

Age and Marital/Dating Status

Students aspiring to careers in veterinary medicine, like most students aspiring to careers in the health professions, entered college directly from high school at age 18 or younger (Tables VI-3 and VI-4). Only blacks tended to delay college entry and thus also tended to be older than the typical freshman: About one-third of the black, compared with only 16.8 percent of the nonblack, aspiring veterinarians were 19 or older at college entry.

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[1] These minority groups will be discussed in further detail in the third report of the series, though the numbers aspiring to careers in veterinary medicine are too small to warrant separate treatment.

[2] No information is available in 1966 for Mexican-Americans and Puerto Ricans.

Table VI-3

Age Distribution, by Race and Sex--1974 Aspiring Veterinarians

Age as of 31 December, 1974	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
16 or younger	.1	---	.1	.2	---	.2	.1	.5	.1
17	1.9	---	2.0	7.0	---	7.4	4.5	14.4	4.7
18	77.5	---	76.8	79.9	---	79.4	78.7	52.4	78.1
19	16.2	---	16.4	11.0	---	11.1	13.6	19.0	13.7
20	1.6	---	1.8	.7	---	.7	1.2	6.1	1.3
21 or older	2.7	---	2.9	1.2	---	1.3	2.0	7.6	2.1

Table VI-4

High School Graduation Year/Status, by Race and Sex--1974 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Graduated 1974	93.7	---	93.4	94.7	---	94.6	94.2	82.7	94.0
Graduated 1973	2.5	---	2.5	2.5	---	2.5	2.5	1.7	2.5
Graduated 1972	1.3	---	1.3	.3	---	.3	.8	1.7	.8
Graduated 1971 or earlier	2.3	---	2.4	1.1	---	1.2	1.7	4.5	1.8
Passed G.E.D. test	.0	---	.3	.1	---	.2	.0	9.5	.2
Never completed high school	.1	---	.1	1.4	---	1.3	.8	.0	.7

Just as aspiring veterinarians tended to be slightly younger than the total freshman population, the proportion of those students who were married at the time of college entry was slightly lower. Female aspiring veterinarians differed somewhat from all freshman women in some of their dating habits: Only 30.8 percent of female aspiring veterinarians but 37.8 percent of all female freshmen were seeing one person exclusively; 27.1 percent indicated that they are not dating at all, compared with 18.3 percent of all female freshmen (Table VI-5). Male aspiring veterinarians, on the other hand, were very similar to all male freshmen in their dating habits. Blacks differed from this pattern drastically in that none reported being married or engaged, and almost four in ten reported not dating at all.

Table VI-5

Marital/Dating Status, by Race and Sex--1974 Aspiring Veterinarians

Marital/Dating Status	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Presently married	1.3	---	1.3	1.1	---	1.1	1.2	.0	1.2
Presently engaged	2.2	---	2.1	2.3	---	2.2	2.2	.0	2.2
Have been seeing one person exclusively	32.4	---	32.1	30.9	---	30.8	31.6	25.6	31.5
Have been seeing several persons, but no one exclusively	45.5	---	45.1	38.8	---	38.9	42.1	34.6	41.9
Have not been dating in recent months	18.7	---	19.4	27.0	---	27.1	22.9	39.8	23.3

Socioeconomic Background

The aspiring veterinarians came from somewhat more affluent and better-educated backgrounds than did the average freshman. Their median parental income for 1973 was $15,950, over $1,560 more than that for the entire freshman population, but $1,799 less than that for aspiring physicians, who were the richest group (Table VI-6). Blacks aspiring to become veterinarians came from less affluent backgrounds, reporting a median parental income of $10,950, which is $5,100 less than that of their nonblack counterparts. When median parental income is considered in 1966 constant dollars as deflated by the Consumer Price Index, one finds little change in the economic status of aspiring veterinarians over the eight-year period (Table VI-7).

Table VI-6

Parental Income(1973), by Race and Sex--1974 Aspiring Veterinarians

Parental Income (1973)	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Less than $3,000	2.0	---	2.0	1.6	---	1.9	1.8	7.9	1.9
$3,000 - $3,999	1.2	---	1.6	1.9	---	2.0	1.6	11.3	1.8
$4,000 - $5,999	2.7	---	3.0	4.4	---	4.3	3.5	9.0	3.7
$6,000 - $7,999	4.8	---	4.9	4.3	---	4.4	4.6	7.3	4.6
$8,000 - $9,999	6.7	---	6.7	8.8	---	8.7	7.7	7.0	7.7
$10,000 - $12,499	12.7	---	12.9	14.8	---	15.0	13.8	20.5	13.9
$12,500 - $14,999	12.6	---	12.5	13.2	---	13.1	12.9	5.3	12.8
$15,000 - $19,999	21.7	---	21.4	17.9	---	17.8	19.8	11.0	19.6
$20,000 - $24,999	14.4	---	14.3	13.2	---	13.0	13.8	8.8	13.7
$25,000 - $29,999	7.6	---	7.4	5.4	---	5.5	6.5	4.9	6.5
$30,000 - $34,999	3.1	---	3.0	3.8	---	3.7	3.5	.0	3.4
$35,000 - $39,999	3.0	---	2.9	2.9	---	2.9	3.0	2.2	2.9
$40,000 - $49,999	2.7	---	2.6	2.9	---	2.8	2.8	.6	2.7
$50,000 or more	4.8	---	4.9	4.9	---	4.8	4.9	4.2	4.9
MEDIAN	$16,666	---	$16,541	$15,273	---	$15,150	$16,050	$10,950	$15,950

Table VI-7

Median Parental Income in Constant Dollars,[a] by Race and Sex--1974, 1972, and 1966 Aspiring Veterinarians

Freshman Class	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974	$11,384	---	$11,298	$10,432	---	$10,348	$10,963	$7,480	$10,895
1972	$11,016	---	$10,856	$10,909	---	$10,930	$10,942	---	$10,880
1966	$9,808	---	$ 9,805	$10,355	---	$10,272	$ 9,895	---	$ 9,883

[a] Median parental income figures are in fiscal 1966 constant dollars as deflated by the Consumer Price Index.

With respect to parents' education, 36.2 percent of the aspiring veterinarians reported that their fathers had at least graduated from college, and 22.6 percent reported that their mothers were equally well educated (Tables VI-8 and VI-9). These proportions were somewhat higher than those for the total freshman population, three in ten of whom reported that their fathers had at least a college degree and one in five of whom reported the same for their mothers.

Table VI-8

Father's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Veterinarians

Father's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	4.5	---	4.7	4.0	---	4.1	4.3	12.2	4.1
Some high school	13.0	---	13.2	10.3	---	10.4	11.6	20.2	11.8
High school graduate	28.8	---	28.7	29.9	---	29.9	29.4	27.5	29.3
Postsecondary school other than college	3.1	---	3.2	3.9	---	4.0	3.5	4.6	3.6
Some college	14.7	---	14.8	14.9	---	14.9	14.8	15.2	14.8
College degree	17.4	---	17.1	20.0	---	19.8	18.7	5.9	18.5
Some graduate school	1.4	---	2.5	1.7	---	1.8	2.3	3.9	2.4
Graduate degree	15.5	---	15.4	15.3	---	15.7	15.4	10.6	15.3
1972:									
Grammar school or less	5.0	---	5.2	5.4	---	5.7	5.2	---	5.4
Some high school	14.7	---	14.8	12.0	---	12.0	13.7	---	13.7
High school graduate	32.4	---	32.4	28.4	---	28.5	30.9	---	30.9
Some college	17.1	---	17.2	17.0	---	17.0	17.1	---	17.1
College degree	16.6	---	16.4	20.0	---	19.9	17.9	---	17.7
Some graduate school	2.8	---	2.8	2.9	---	2.9	2.8	---	2.8
Graduate degree	11.4	---	11.3	14.2	---	13.9	12.5	---	12.3
1966:									
Grammar school or less	6.5	---	6.8	5.6	---	6.3	6.2	---	6.6
Some high school	17.0	---	16.9	11.1	---	11.3	15.5	---	15.5
High school graduate	30.8	---	30.7	25.7	---	25.2	29.5	---	29.3
Some college	21.4	---	21.0	25.5	---	25.2	22.4	---	22.1
College degree	15.5	---	15.9	19.9	---	19.5	16.6	---	16.8
Postgraduate degree	8.8	---	8.9	12.4	---	12.5	9.7	---	9.8

Table VI-9

Mother's Education, by Race and Sex--1974, 1972, and 1966 Aspiring Veterinarians

Mother's Education	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
Grammar school or less	1.8	---	2.3	1.9	---	2.0	1.8	14.0	2.1
Some high school	8.9	---	8.8	10.1	---	10.3	9.5	13.1	9.6
High school graduate	44.6	---	44.5	36.5	---	36.7	40.5	37.4	40.3
Postsecondary school other than college	6.4	---	6.4	9.9	---	9.9	8.1	9.7	8.2
Some college	18.2	---	18.0	16.0	---	15.9	17.1	7.8	16.9
College degree	13.8	---	13.7	16.0	---	16.0	15.0	11.9	14.9
Some graduate school	1.9	---	1.9	1.1	---	1.1	2.5	2.1	2.5
Graduate degree	4.5	---	4.5	6.6		6.6	5.5	8.9	5.6
1972:									
Grammar school or less	2.9	---	3.0	2.6	---	2.5	2.8	---	2.8
Some high school	9.9	---	9.9	9.1	---	9.2	9.6	---	9.6
High school graduate	48.2	---	48.3	38.2	---	38.2	44.4	---	44.4
Some college	18.2	---	18.2	22.1	---	22.3	19.7	---	19.7
College degree	14.4	---	14.3	17.9	---	17.7	15.8	---	15.6
Some graduate school	2.0	---	2.0	3.2	---	3.2	2.4	---	2.5
Graduate degree	4.4	---	4.4	7.0	---	7.0	5.4	---	5.4
1966:									
Grammar school or less	3.0	---	3.2	2.4	---	2.3	2.9	---	3.0
Some high school	12.0	---	12.0	7.3	---	7.2	10.8	---	10.8
High school graduate	48.4	---	48.2	43.5	---	44.0	47.2	---	47.1
Some college	20.5	---	20.2	25.7	---	25.5	21.9	---	21.6
College degree	13.5	---	13.6	17.9	---	17.8	14.7	---	14.7
Postgraduate degree	2.5	---	2.8	3.2	---	3.1	2.7	---	2.9

Women aspiring to become veterinarians were slightly more likely than men to have college-educated fathers, but men were much more likely to have college-educated mothers. Blacks aspiring to veterinary medicine came from decidedly less educated backgrounds: only 20.4 (or 16 percentage points fewer than their nonblack counterparts) reported that their fathers had a college education or better. In fact, their mothers tended to be more highly educated than their fathers: 22.9 percent had at least graduated from college, a difference of 2.5 percentage points.

The educational level of the parents of aspiring veterinarians rose over the eight-year period studied. In 1966, only 26.6 percent reported that their fathers had at least a college education, a figure almost 10 percentage points lower than that for the 1974 group; 17.6 percent said that their mothers had at least a college education, a difference of 5 percentage points.

Though over one-third of the aspiring veterinarians indicated that their fathers had a college degree, about one-fourth indicated that their fathers were employed in a professional position (e.g., health professions, education, engineering, law, research), and another one-fourth indicated that their fathers were in business (Table VI-10). The proportion of blacks who had fathers in the professions or business was one in three. Only one in twenty nonblacks indicated that their father worked in a health field (the professions or nursing and allied health professions), in contrast to almost one in ten blacks. One in twenty blacks had fathers who were college educators, compared with slightly over 1 percent of

Table VI-10

Father's Occupation, by Race and Sex--1974 Aspiring Veterinarians

Father's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	1.8	---	1.7	1.4	---	2.8	2.3	.6	2.3
Dentist	.8	---	.8	.5	---	.5	.7	.0	.6
Pharmacist	.3	---	.3	.4	---	.5	.4	2.6	.4
Optometrist	.1	---	.1	.2	---	.2	.1	.0	.1
Veterinarian	2.3	---	2.3	.5	---	.5	1.4	1.6	1.4
Nurse	.0	---	.0	.0	---	.1	.0	3.1	.1
Home Economist-Dietician	.0	---	.0	.0	---	.0	.0	.0	.0
Health technical or technologist	.2	---	.2	.1	---	.1	.1	1.2	.2
Therapist	.1	---	.1	.1	---	.1	.1	.0	.1
Artist	.7	---	.7	.6	---	.6	.7	.0	.6
Business manager	24.5	---	24.1	26.0	---	25.7	25.3	8.3	24.9
Clergy	.6	---	.6	.2	---	.2	.4	.0	.4
Educator (college)	1.3	---	1.3	1.3	---	1.5	1.3	5.2	1.4
Educator (secondary)	2.5	---	2.5	2.2	---	2.2	2.4	.0	2.3
Educator (elementary)	1.3	---	1.2	.3	---	.3	.8	.6	.8
Education (special)	.4	---	.4	.2	---	.2	.3	1.1	.3
Engineer	7.0	---	6.9	9.1	---	8.9	8.0	1.9	7.9
Farmer/Forester	11.3	---	11.2	8.2	---	8.0	9.7	2.0	9.6
Lawyer	1.3	---	1.3	1.4	---	1.4	1.4	.0	1.4
Research scientist	1.1	---	1.1	.4	---	.4	.8	.0	.8
Skilled worker	20.2	---	20.4	17.0	---	17.1	18.6	25.0	18.7
Unskilled worker	5.1	---	5.5	6.7	---	6.8	5.9	18.5	6.2
Other professional[a]	3.0	---	3.0	2.4	---	2.5	2.7	5.6	2.7
Other nonprofessional[b]	12.6	---	12.6	17.9	---	18.1	15.3	19.6	15.4
Unemployed	1.7	---	1.8	1.5	---	1.4	1.6	3.1	1.6

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

of all freshmen and of nonblack aspiring veterinarians. Of the remainder, one-fourth of the nonblack aspirants indicated that their fathers were engaged in skilled or unskilled labor, somewhat fewer than for the total freshman population, whereas 43.5 percent of the blacks indicated that their fathers were thus employed.

Similarly, although one-fourth of the aspiring veterinarians indicated that their mothers had at least a college degree, only one-sixth said that their mothers were employed in a profession, and one-tenth indicated that they were employed in business (Table VI-11). However, three out of five aspiring veterinarians said that their mothers were employed in some other nonprofessional position (a category that includes homemaker), and one in fifteen reported that their mothers were unemployed.

Table VI-11

Mother's Occupation, by Race and Sex--1974 Aspiring Veterinarians

Mother's Occupation	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Physician	.0	---	.0	.0	---	.0	.0	.0	.0
Dentist	.5	---	.5	.1	---	.1	.3	.0	.3
Pharmacist	.0	---	.0	.0	---	.0	.0	.0	.0
Optometrist	.0	---	.0	.0	---	.0	.0	.0	.0
Veterinarian	.0	---	.0	.0	---	.0	.0	.0	.0
Nurse	6.0	---	6.0	7.7	---	7.7	6.9	7.3	6.9
Home Economist-Dietician	.8	---	.8	.1	---	.1	.4	.0	.4
Health technician or technologist	.4	---	.4	.5	---	.5	.4	1.4	.4
Therapist	.1	---	.1	.4	---	.4	.2	.0	.2
Artist	.2	---	.2	1.5	---	1.5	.9	.0	.9
Business manager	10.3	---	10.2	9.3	---	9.3	9.8	6.4	9.7
Clergy	.1	---	.1	.0	---	.0	.0	1.9	.1
Educator (college)	.2	---	.2	1.0	---	1.0	.6	.9	.6
Educator (secondary)	1.7	---	1.7	2.7	---	2.7	2.2	1.3	2.2
Educator (elementary)	2.8	---	2.8	2.7	---	2.8	2.8	5.0	2.8
Education (special)	1.4	---	1.3	.9	---	.9	1.1	.0	1.1
Engineer	.1	---	.1	.1	---	.1	.1	.0	.1
Farmer/Forester	1.1	---	1.1	.6	---	.5	.8	.0	.8
Lawyer	.1	---	.1	.1	---	.1	.1	.0	.1
Research scientist	.0	---	.0	.0	---	.0	.0	.0	.0
Skilled worker	.5	---	.5	.8	---	.7	.6	.0	.6
Unskilled worker	2.2	---	2.3	1.6	---	1.8	1.9	7.8	2.0
Other professional[a]	2.4	---	2.5	2.7	---	2.9	2.6	9.5	2.7
Other nonprofessional[b]	62.4	---	62.6	61.5	---	60.6	61.9	44.5	61.6
Unemployed	6.8	---	6.8	5.9	---	6.3	6.4	14.1	6.5

[a] Includes architect, computer programmer, government official, librarian, mathematician, statistician, clinical psychologist, social welfare worker.

[b] Includes homemaker.

Among blacks, only 44.5 percent indicated that their mothers were employed in some nonprofessional field. Over one-fourth said that their mothers worked in a profession (including education and nursing and allied health professions) and 14.1 percent said that their mothers were unemployed. Interestingly, only 5.2 percent of the aspiring veterinarians had fathers who were employed in a health field, while 8.2 percent had mothers who worked in a health field.

College Finances

The age of majority has been lowered to age 18 in many states, increasing the probability that students will declare themselves financially independent from their parents and thus qualify for federal student aid programs for which they might not otherwise be eligible. Aspiring veterinarians were not as apt to claim this status as were freshmen-in-general (Table VI-12). Nonblacks in this group were slightly less likely than freshmen-in-general, and blacks slightly more likely, to say that they were financially independent of their parents. Men were more likely than women to claim financial independence: 18.7 percent and 12.2 percent, respectively, for the 1974 year.

Table VI-12

Financial Independence from Parents, by Race and Sex--1974 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Financial independence THIS year:									
No	81.6	---	81.3	87.7	---	87.8	84.7	80.8	84.6
Yes	18.4	---	18.7	12.3	---	12.2	15.3	19.2	15.4
Financial independence LAST year:									
No	88.7	---	88.3	90.5	---	90.6	89.6	84.4	89.5
Yes	11.3	---	11.7	9.5	---	9.4	10.4	15.6	10.5

Given these facts, it is not surprising that over three-quarters of the aspiring veterinarians expected to receive parental support to finance their first year in college (Table VI-13). Their expectations as to the amount of help they would receive from their parents, however, differed drastically by subgroup. For instance, black aspiring veterinarians expected only $480 in parental support, in contrast to the $1,246 expected by nonblacks.

Table VI-13

Anticipated Sources and Amounts of Financial Support for First Year of College, by Race and Sex--1974 Aspiring Veterinarians

		Men			Women			Total		
		Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Parental, or family aid or gift	%	73.2	---	73.2	94.2	---	83.7	78.5	78.8	78.6
	(Medn.)	$1,111	---	$1,098	$1,376	---	$1,355	$1,246	$480	$1,230
Basic Educational Opportunity Grants	%	15.4	---	16.0	15.0	---	15.8	15.2	45.0	15.9
	(Medn.)	$488	---	$525	$415	---	$429	$449	$869	$468
Supplemental Educational Opportunity Grants	%	2.2	---	4.9	3.6	---	3.6	4.0	15.1	4.2
	(Medn.)	$394	---	$250	$390	---	$387	$392	$337	$386
College Work Study grant	%	9.8	---	10.1	9.4	---	9.5	9.6	20.7	9.8
	(Medn.)	$401	---	$391	$372	---	$379	$386	$374	$385
State scholarship or grant	%	12.8	---	13.4	18.5	---	18.4	15.7	25.0	15.9
	(Medn.)	$407	---	$427	$401	---	$405	$404	$976	$414
Local or private scholarship or grant	%	14.1	---	14.1	14.9	---	15.0	14.5	17.3	14.6
	(Medn.)	$380	---	$376	$378	---	$382	$379	$387	$379
Federal Guaranteed Student Loan	%	6.4	---	6.8	7.2	---	7.4	6.8	19.2	7.1
	(Medn.)	$1,040	---	$983	$1,057	---	$1,077	$1,049	$451	$1,036
National Direct Student Loan	%	4.8	---	5.1	7.7	---	7.9	6.3	17.3	6.5
	(Medn.)	$579	---	$520	$752	---	$726	$688	$305	$653
Other loan	%	4.8	---	4.7	5.4	---	5.4	5.1	3.9	5.1
	(Medn.)	$943	---	$939	$950	---	$942	$949	$607	$941
Full-time work	%	11.5	---	11.7	4.0	---	4.3	7.7	17.5	7.9
	(Medn.)	$786	---	$776	$554	---	$504	$716	$434	$694
Part-time or summer work	%	61.3	---	61.4	58.2	---	57.6	59.7	47.5	59.5
	(Medn.)	$509	---	$497	$342	---	$341	$409	$291	$406
Savings	%	47.3	---	46.9	24.7	---	48.7	48.4	22.2	47.8
	(Medn.)	$462	---	$459	$348	---	$347	$395	$291	$408
Spouse	%	1.0	---	.1	1.0	---	1.0	1.0	.0	1.0
	(Medn.)	$499	---	$499	$322	---	$322	$389	---	$389
Your G.I. benefits	%	2.0	---	2.1	.3	---	.3	1.1	3.4	1.2
	(Medn.)	$2,179	---	$1,957	$341	---	$341	$1,874	$750	$1,500
Your parent's G.I. benefits	%	1.6	---	1.5	1.4	---	1.4	1.5	.0	1.4
	(Medn.)	$424	---	$424	$324	---	$324	$370	---	$370
Social security dependent's benefits	%	5.2	---	5.3	5.6	---	5.7	5.4	11.2	5.5
	(Medn.)	$1,019	---	$946	$561	---	$517	$661	$374	$633
Other	%	3.6	---	3.5	3.4	---	3.4	3.5	1.5	3.4
	(Medn.)	$534	---	$550	$373	---	$370	$433	>$4,000	$434

Though black students expected to receive less parental support than did nonblacks, this disadvantage was somewhat offset by their higher participation rates in federal aid programs. For instance, 45 percent of the blacks participated in the BEOG program, compared with only 15.2 percent of the nonblacks. In addition, blacks expected almost twice as much in BEOG funds as nonblacks: $869 versus $449.

Blacks were also four times more likely than nonblacks to participate in SEOG programs, but the median award expected was about the same, $337 and $392, respectively. About twice as many blacks as nonblacks (20.7 percent versus 9.6 percent) expected College Work-Study (CWS) support, but nonblacks expected slightly larger amounts.

Larger proportions of blacks than of nonblacks received state scholarships (25 percent versus 15.7 percent); their average grant also tended to be larger ($976 versus $404). Blacks were also more likely than were nonblacks to participate in loan programs, but they expected to borrow smaller amounts.

Earnings from employment and savings accounted for a large portion of college finances for all aspiring veterinarians, though more so and in greater amounts for the nonblack students. Almost half of the nonblack aspirants expected to finance their first year of college from their own savings as compared with less than one-fourth of the black aspirants. About three-fifths of nonblacks but only about half of blacks expected to work part-time; on the other hand, 17.5 percent of blacks and 7.7 percent of nonblacks expected to work full-time.

The remaining sources of support were used by very few students, with the exception that 11.2 percent of the blacks expected to tap into their parents' social security benefits.

Among aspiring veterinarians, roughly equal proportions of men and women expected financial support from all sources except three. Women were more likely than men to receive parental support, and in larger amounts, and they were somewhat more likely to receive state scholarship aid. Men expected to have to work full time and expected a greater amount of money for their efforts than did women.

Though their participation rates were similar, women expected to receive more financial aid from SEOG and NDSL than did men. Men, however, relied on heavier funding from employment, savings, their own G.I. benefits, social security, and "other" sources, though only one in ten relied on the last three to any extent.

Blacks were more likely than were nonblacks to express major concern over financing their college education (32.3 percent versus 16 percent) (Table VI-14). As was the case with all other aspiring

Table VI-14

Concern Over Financing College Education, by Race and Sex--1974, 1972, and 1966 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1974:									
No concern	33.9	---	33.8	31.6	---	31.2	32.8	21.0	32.5
Some concern	51.0	---	50.7	51.4	---	51.5	51.2	46.7	51.1
Major concern	15.1	---	15.5	17.0	---	17.2	16.0	32.3	16.4
1972:									
No concern	31.9	---	31.5	24.2	---	24.1	29.0	---	28.7
Some concern	54.4	---	54.6	60.5	---	60.1	56.7	---	56.7
Major concern	13.6	---	13.9	15.3	---	15.8	14.3	---	14.6
1966:									
No concern	30.7	---	30.9	32.8	---	32.5	31.2	---	31.3
Some concern	61.9	---	61.7	57.4	---	57.4	60.8	---	60.6
Major concern	7.4	---	7.5	9.9	---	10.1	8.0	---	8.2

health professionals, this concern was related primarily to income; however, one in five blacks at the upper income level were still very concerned about their ability to finance their college education in contrast to only one in twenty nonblacks (Figures VI-2 and VI-3).

FIGURE VI-2

Proportion Reporting Major Concern Over Financing College Education
by Sex, Race, and by Parental Income--1974 Aspiring Veterinarians

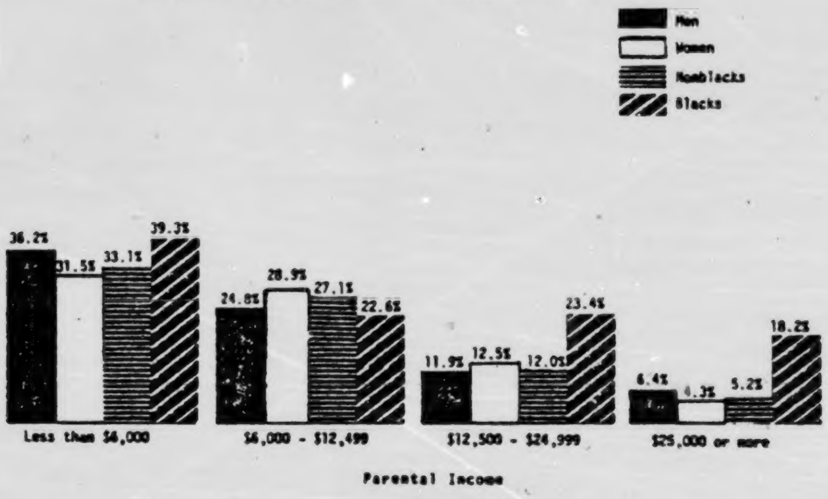
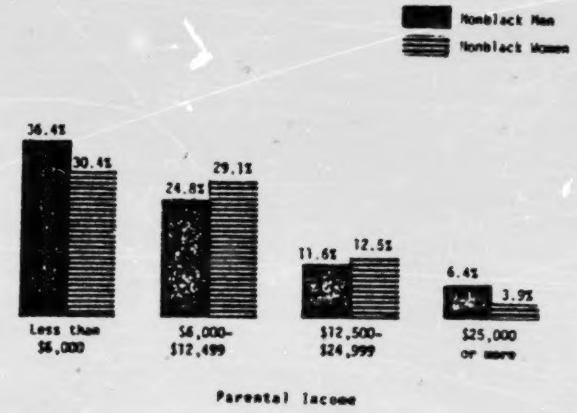


FIGURE VI-3

Proportion Reporting Major Concerns Over Financing College Education
by Race and Sex, and by Parental Income--1974 Aspiring Veterinarians



Self-Ratings

The survey questionnaire completed by these aspiring veterinarians at college entry asked them to compare themselves with other students of the same age on a variety of traits. Aspiring veterinarians did not on the whole have a highly positive self-image; on many traits, they considered themselves above average only slightly more often than did the entire freshman class (Table VI-15). Larger proportions of aspiring veterinarians than of freshmen-in-general rated themselves high on stubborness (47.9 percent versus 36.9 percent), academic ability (65.8 percent versus 53 percent), drive to achieve (69.9 percent versus 59.9 percent), political liberalism (29 percent versus 20.1 percent), intellectual self-confidence (47.5 percent versus 40.7 percent), and mathematical ability (38.8 percent versus 33.4 percent). Overall,

Table VI-15

Self-Ratings,[a] by Race and Sex 1974 Aspiring Veterinarians and All Freshmen

Trait	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Academic ability	66.5	---	66.1	65.7	---	65.7	66.1	51.8	65.8	53.0
Athletic ability	48.0	---	47.7	35.3	---	34.9	41.6	27.3	41.2	38.5
Artistic ability	15.6	---	15.9	25.9	---	25.9	20.8	26.7	20.9	19.5
Cheerfulness	48.1	---	48.1	52.2	---	52.3	50.1	53.5	50.2	52.2
Defensiveness	30.2	---	30.4	26.9	---	27.2	28.6	37.0	28.7	27.1
Drive to achieve	70.7	---	70.5	69.0	---	69.3	69.9	70.1	69.9	59.9
Leadership ability	49.0	---	49.2	38.2	---	38.3	43.6	49.7	45.7	41.3
Mathematical ability	43.4	---	42.7	35.2	---	34.8	39.2	19.1	38.8	33.4
Mechanical ability	39.7	---	39.0	15.8	---	15.6	27.5	10.6	27.2	23.8
Originality	39.3	---	39.4	38.1	---	38.1	38.6	42.8	38.8	37.4
Physical attractiveness	27.4	---	27.4	19.1	---	19.3	23.2	30.2	23.3	26.1
Political conservatism	16.0	---	15.7	7.5	---	7.5	11.6	7.8	11.6	10.5
Political liberalism	17.6	---	18.0	19.6	---	20.1	18.6	38.9	29.0	20.1
Popularity	34.0	---	33.8	22.3	---	22.4	28.0	26.1	28.0	30.2
Popularity with opposite sex	32.7	---	32.5	18.5	---	18.7	25.5	25.3	25.5	29.4
Public speaking ability	22.6	---	22.6	17.2	---	17.3	19.8	25.4	20.0	20.7
Intellectual self-confidence	52.6	---	52.7	42.2	---	42.5	47.3	54.9	47.5	40.7
Social self-confidence	37.6	---	37.8	26.5	---	26.7	32.0	43.2	32.2	33.9
Sensitivity to criticism	23.8	---	23.8	27.9	---	27.8	25.8	26.0	25.9	25.1
Stubbornness	44.6	---	44.1	51.8	---	51.6	48.4	26.8	47.9	36.9
Understanding of others	58.8	---	58.6	64.7	---	64.9	61.8	63.4	61.8	65.9
Writing ability	31.5	---	31.8	34.8	---	35.0	33.2	43.3	33.4	30.5

they tended to rate themselves above average less frequently than the total freshman class primarily on social traits. For instance, they were less likely than the typical freshman to rate themselves high on understanding of others, popularity (including popularity with the opposite sex), physical attractiveness, cheerfulness, and social self-confidence. On all other traits, they rated themselves above average slightly more frequently than did the general freshman population, but many of their ratings were more modest than those of aspiring physicians or dentists.

As was the case with other aspiring health professionals, blacks planning careers as veterinarians tended to be more socially self-confident than their nonblack counterparts and somewhat less confident academically. More nonblacks than blacks rated themselves above average on academic ability (66.1 percent versus 51.8 percent) and mathematical ability (39.2 percent versus 19.1 percent). Yet they were more likely than were nonblacks to see themselves as intellectually self-confident (54.9 percent versus 47.5 percent). In addition, they tended to rate themselves above average more frequently on such traits as artistic ability, leadership ability, public speaking ability, writing ability, originality, defensiveness, and less frequently on athletic ability and mechanical ability.

Life Goals

Respondents to the freshman questionnaire were asked to indicate the relative importance they attached to a number of life goals. Overall, freshmen attached great importance to becoming an authority in their field (62.2 percent), helping others in difficulty (61.3 percent), and developing a meaningful philosophy of life (61.1 percent).

Aspiring veterinarians indicated that becoming an authority in the field was very important to them even more often than did the total freshman population (70.5 percent), but the most important goal was to be successful in a business of their own (71.7 percent), not surprising, considering the nature of this career (Table VI-16). Though they were interested in developing a

Table VI-16

Life Goals,[a] by Race and Sex--1974 Aspiring Veterinarians and All Freshmen

Life Goal	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	5.9	---	6.0	6.7	---	7.0	6.3	15.5	6.4	11.4
Becoming an authority in my field	73.2	--	73.3	67.6	---	67.7	70.4	75.0	70.5	62.2
Obtaining recognition from my colleagues for contributions to my field	45.4	---	45.6	38.0	---	38.6	41.7	58.0	42.0	39.0
Influencing the political structure	10.2	---	10.6	6.9	---	7.3	8.5	26.4	8.9	12.5
Influencing social values	18.0	---	18.4	19.5	---	19.3	18.8	33.0	19.1	27.2
Raising a family	55.6	---	55.5	37.4	---	37.5	46.3	46.8	46.4	55.0
Having administrative responsibility for the work of others	23.6	---	23.4	12.6	---	13.1	17.9	26.5	18.2	25.6
Being very well-off financially	52.3	---	53.0	32.4	---	32.8	42.3	66.4	42.7	45.8
Helping others who are in difficulty	53.7	---	54.1	61.0	---	61.0	57.4	69.1	56.2	61.3
Making a theoretical contribution to science	30.6	---	30.7	28.5"	---	8.9	29.6	40.2	29.8	13.0
Writing original works (poems, novels, short stories, etc.)	6.6	---	6.7	9.3	---	9.4	8.0	14.7	8.1	11.9
Creating artistic work (painting, sculpture, decorating, etc.)	6.4	---	6.5	14.2	---	14.2	10.4	15.0	10.5	13.9
Being successful in a business of my own	79.1	---	79.2	64.4	---	64.6	71.5	70.5	71.7	37.9
Becoming involved in programs to clean up the environment	26.7	---	34.8	19.6	---	36.5	35.6	40.3	35.7	25.9
Developing a meaningful philosophy of life	56.5	---	56.4	65.0	---	65.1	60.8	61.6	60.9	61.1
Participating in a community action program	27.5	---	27.8	25.3	---	25.5	26.3	36.4	26.6	27.5
Keeping up to date with political affairs	29.7	---	30.0	27.6	---	27.9	28.6	42.6	28.9	36.6

[a] Life goals rated as "Very important" or "essential".

meaningful philosophy of life (60.9 percent) and helping others in difficulty (56.2 percent), these goals were slightly less important to them than to the total freshman population. They felt that becoming involved in programs to clean up the environment was important more often than did the total freshman population (35.7 percent versus 25.9 percent). They attached importance to some other goals significantly less often than the general population. For instance, 55 percent of all freshmen felt that raising a family was very important, while only 46.4 percent of all aspiring veterinarians gave this high priority. Similarly, only 28.9 percent of the aspiring veterinarians, as opposed to 36.6 percent of all freshmen, considered keeping up-to-date with political affairs as very important; 19.1 percent versus 27.2 percent considered influencing social values as important; 18.2 percent versus 25.6 percent considered having administrative responsibility for the work of others as very important; and 6.4 percent versus 11.4 percent considered becoming accomplished in the performing arts as very important.

Of the aspiring veterinarians, men and women tended to endorse the various life goals at similar rates. But some sex difference did appear. Fewer women (37.5 percent) than men (55.5 percent) gave high priority to raising a family though the reverse was true in the general freshman population. Being very well-off financially was also less important to women aspirants than to men (32.8 percent versus 53 percent), as was gaining recognition from colleagues for contributions to the field (38.6 percent versus 45.6 percent) and having administrative responsibility for the work of others (13.1 percent versus 23.4 percent). On the other hand, more women than men emphasized helping others (61 percent versus 54.1 percent) and developing a meaningful philosophy of life (65.1 percent versus 56.4 percent).

Black aspiring veterinarians tended to endorse more goals as important than did their nonblack counterparts. Being well-off financially was very important to 65.4 percent of the blacks compared with only 42.3 percent of the nonblacks. Other goals which were more important to blacks but less important to nonblacks included influencing the political structure (26.4 percent versus 8.5 percent), keeping up-to-date with political affairs (42.6 percent versus 28.6 percent), influencing social values (33 percent versus 18.8 percent), helping others (69.1 percent versus 57.4 percent), having administrative responsibility for the work of others (26.5 percent versus 17.9 percent), becoming accomplished in the performing arts (15.5 percent versus 6.3 percent), and writing original works (14.7 percent versus 8 percent). In addition, blacks were more interested in obtaining recognition from colleagues for contributions to the field (58 percent versus 41.7 percent), making a theoretical contribution to science (40.2 percent versus 29.6 percent), and participating in community action programs (36.4 percent versus 26.3 percent).

Identity Groups

When asked to indicate the degree to which they identified with each of several groups, aspiring veterinarians gave responses very similar to those of the total freshman class: Most felt a strong or very strong identification with people of their own generation (70.2 percent) (Table VI-17). Few freshmen-in-general identified closely with others of the same religion (22.8 percent), and even fewer nonblack aspiring veterinarians considered this a strong identity group (16.9 percent). However, 27.1 percent of the black aspiring veterinarians identified closely with people of the same religion. Blacks also more often identified with others of the same race or ethnic background (64.8 percent versus 38.1 percent), but they less often identified strongly with other people in the community (27.9 percent versus 42.4 percent). Men were more likely than were women to identify with others in their community

Table VI-17

Identity Groups, by Race and Sex—1974 Aspiring Veterinarians and All Freshmen

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
People who live in my community										
Strongest of all	13.5	---	13.6	12.6	---	12.5	13.1	11.5	13.0	13.6
Strongly	31.0	---	30.7	27.7	---	27.4	29.3	16.4	29.0	28.6
Moderately	43.9	--	44.1	44.0	---	44.2	44.0	51.8	44.1	44.0
Little or none	11.6	---	11.7	15.7	---	15.9	13.7	20.3	13.8	13.8
People of my own religion										
Strongest of all	4.5	---	4.4	4.5	---	4.5	4.5	2.7	4.5	6.7
Strongly	12.7	---	12.9	11.6	---	12.0	12.2	24.4	12.4	16.1
Moderately	44.3	---	44.1	40.0	---	39.9	42.1	35.4	41.9	42.7
Little or none	38.5	---	38.6	43.9	---	43.7	41.3	37.5	41.2	34.6
People of my own sex										
Strongest of all	2.4	---	2.4	2.6	---	2.5	2.5	0.5	2.5	3.5
Strongly	26.1	---	26.1	33.9	---	34.2	30.0	38.0	30.2	32.8
Moderately	63.1	---	63.3	57.5	---	57.4	60.2	60.6	60.3	56.1
Little or None	8.4	---	8.3	6.0	---	5.9	7.2	0.9	7.1	7.5
People of my own race or ethnic group										
Strongest of all	7.8	---	8.4	4.7	---	5.1	6.2	30.0	6.7	8.2
Strongly	34.1	---	33.9	29.8	---	30.2	31.9	34.8	32.0	34.4
Moderately	46.0	---	45.8	51.9	---	51.4	49.0	33.0	48.6	45.5
Little or None	12.1	---	11.9	13.6	---	13.4	12.9	2.2	12.6	11.9
People of my own generation										
Strongest of all	30.5	---	30.3	30.6	---	30.4	30.6	20.6	30.3	29.1
Strongly	40.0	---	40.1	39.7	---	39.7	39.9	40.3	39.9	42.6
Moderately	25.7	---	26.0	27.1	---	27.3	26.4	36.6	26.7	25.1
Little or none	3.7	---	3.7	2.5	---	2.6	3.1	2.6	3.1	3.1

(44.3 percent versus 39.9 percent) and with others of their own race (42.3 percent versus 35.3 percent), whereas women tended to identify with others of the same sex (36.7 percent compared with only 28.5 percent of the men).

Summary

In 1974, the typical aspiring veterinarian came from a family of above-average income and education where the parents were employed in professional or other fairly high-level positions. They were no more concerned about financing their college education than were other freshmen and tended to rely heavily on a few major sources: namely, parental support, earnings from employment, and savings.

They seemed to be above-average intellectually and academically if not in social skills and self-confidence. Primarily goal-directed and career-oriented, they aimed at being successful in the career they have chosen and manifested little dependence on others or interest in society as a whole. Aspiring veterinarians, like all freshmen, tended to identify most closely with others of the same generation and, to a lesser extent, with those in the same community.

This career is becoming increasingly attractive to women, probably because it offers the independence that they seem to value. Blacks and other minorities are not as yet entering this profession in significant numbers. Those few who have shown an interest in becoming veterinarians are much more socially inclined than are the nonblacks, both in their self-perceptions and in their ultimate life goals, but somewhat less able academically.

College Choice

When asked to indicate the importance of several possible reasons for choosing the college they were attending, 57 percent of the aspiring veterinarians indicated that the academic reputation of the college was very important: More women than men (61.1 percent versus 50.8 percent) and more blacks than nonblacks (71.9 percent versus 56.7 percent) cited this reason (Table VI-18). The special educational programs offered by the institution were especially important to blacks (58.6 percent versus 44.4 percent of the nonblacks) and to women (52.3 percent versus 36.7 percent of the men).

In view of recent increases in college costs, it is not surprising that low tuition has become an increasingly attractive feature, named by 17.8 percent of the aspiring veterinarians in 1972 and 25.7 percent in 1974. No comparable increase occurred with respect to the offer of financial assistance: Only about one in eight aspiring veterinarians cited that as an important consideration in 1972 and in 1974. The financial aspects were much more important in college choice to blacks than to nonblacks; about half indicated that low tuition and financial assistance were very important.

In 1974, fully four-fifths of the aspiring veterinarians enrolled in public institutions, compared with about three-fourths of the entering freshman class (Figure VI-4). Sex appears to be unrelated to attendance patterns, while blacks were somewhat

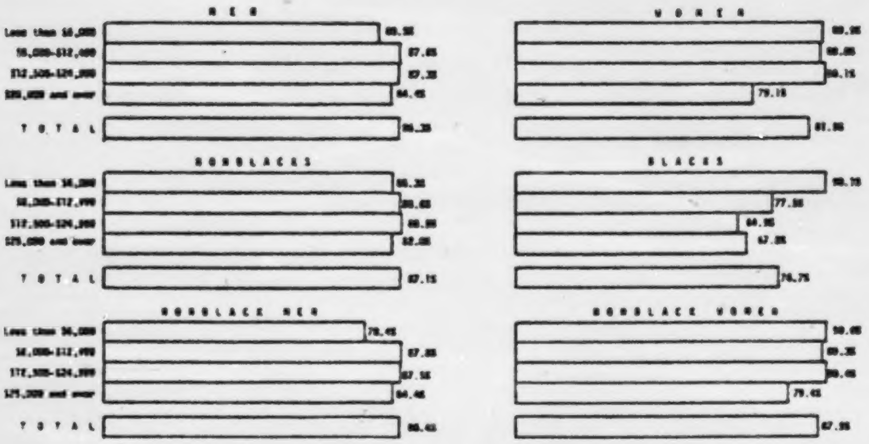
Table VI-18

Reasons for College Choice, by Race and Sex--1974 and 1972 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
1 9 7 4									
Low tuition:									
Very important	25.0	---	25.4	25.2	---	25.9	25.1	49.9	25.7
Somewhat important	34.9	---	34.9	37.7	---	37.4	36.3	27.8	36.2
Not important	40.1	---	39.7	37.1	---	36.8	38.6	22.3	38.2
Special programs offered:									
Very important	36.5	---	36.7	52.0	---	52.3	44.4	58.6	44.7
Somewhat important	29.6	---	29.8	25.4	---	25.3	27.4	30.8	27.5
Not important	34.0	---	33.5	22.6	---	22.4	28.2	10.6	27.8
Offered financial assistance:									
Very important	12.2	---	13.0	11.7	---	12.5	12.0	50.0	12.8
Somewhat important	11.6	---	11.6	17.2	---	17.1	14.4	14.5	14.4
Not important	76.2	---	75.4	71.2	---	70.4	73.6	35.6	72.8
Very good academic reputation:									
Very important	50.4	---	50.8	62.8	---	61.1	56.7	71.9	57.0
Somewhat important	38.9	---	38.6	31.0	---	32.9	34.9	24.4	34.7
Not important	10.7	---	10.6	6.3	---	6.0	8.5	3.7	8.4
1 9 7 2									
Low tuition:									
Very important	17.9	---	18.2	16.8	---	17.0	17.5	---	17.8
Somewhat important	33.2	---	33.2	31.1	---	30.8	32.4	---	32.2
Not important	48.9	---	48.7	52.1	---	52.2	50.2	---	50.0
Special programs offered:									
Very important	36.8	---	36.8	47.8	---	47.4	41.0	---	40.9
Somewhat important	26.7	---	26.9	20.9	---	21.3	24.5	---	24.8
Not important	36.5	---	36.2	31.4	---	31.3	34.5	---	34.3
Offered financial assistance:									
Very important	10.8	---	11.4	13.0	---	13.7	11.6	---	12.2
Somewhat important	13.1	---	13.2	10.8	---	10.8	12.2	---	12.3
Not important	76.1	---	75.4	76.3	---	75.6	76.1	---	75.5
College had good reputation:									
Very important	49.7	---	49.8	62.3	---	62.7	54.6	---	54.8
Somewhat important	35.2	---	35.2	30.0	---	29.7	33.2	---	33.1
Not important	51.1	---	14.9	7.6	---	7.7	12.2	---	12.1

FIGURE VI-4

Proportion Enrolled in Public Institutions, by Race and Sex--1974 Aspiring Veterinarians



less likely to attend public institutions than were nonblacks (76.7 percent versus 87.1 percent).[3] Parental income had less effect on public-private attendance patterns than might be expected, except again among blacks, nine in ten of whom from the lowest income group (parental income under $6,000) but only two in three of whom from the highest income group (parental income $25,000 and over) attended public institutions.

Looking at the type of institution enrolled in, one finds little difference between the sexes, but there was a racial/ethnic difference (Figure VI-5). Two out of five nonblacks enrolled in universities consistently over the eight-year period. Among blacks, however, the figure was closer to one in five. As was the case

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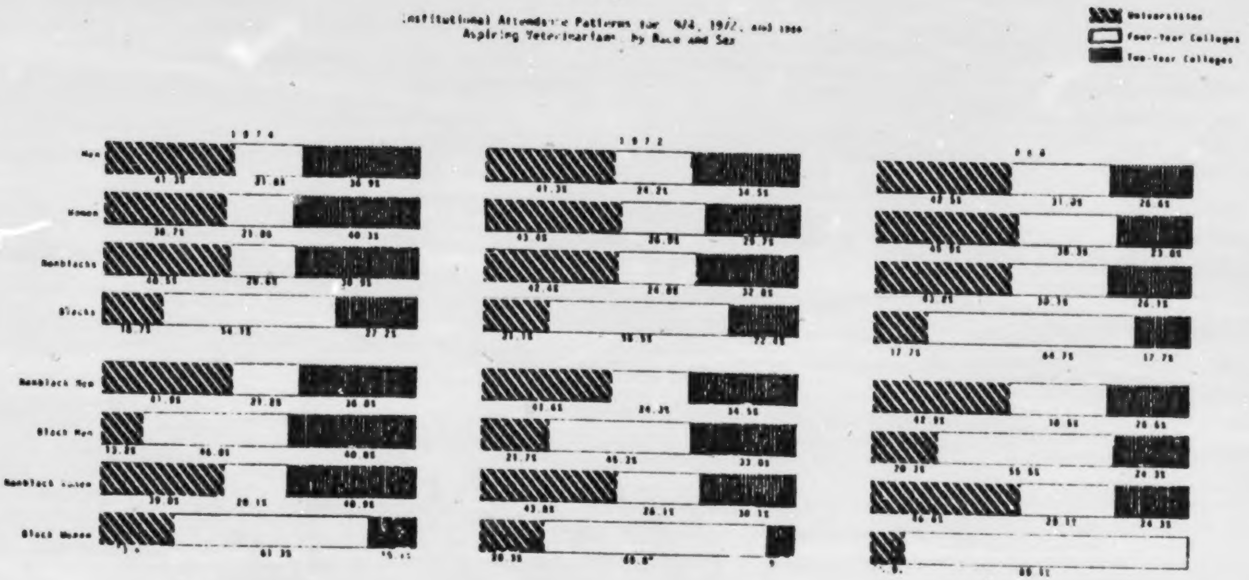
[3] As was explained in earlier chapters, blacks tend to attend predominantly black institutions, many of which are in the private sector.

FIGURE VI-6

Institutional Attendance Patterns for 1974, 1972, and 1966
Aspiring Veterinarians, by Race and Sex



with other students, the proportion of aspiring veterinarians entering two-year colleges increased during the period from 1966 to 1974.

Institutional attendance patterns seem to be more related to parental income than to race/ethnicity or sex (Figures VI-6 and VI-7). Over 40 percent of the nonblack 1974 aspirants from the lowest income category (less than $6,000) entered two-year institutions while fewer than 30 percent of those from the top income level ($25,000 and over) entered these institutions. Conversely, between 45 and 50 percent of the highest income group of nonblacks entered universities. Between 1972 and 1974 both universities and two-year colleges gained women and nonblack aspiring veterinarians from the lower income levels, and four-year colleges lost such students. In fact, the proportion of students enrolling in four-year colleges had dropped over the two-year period regardless of the income level of the student's family.

Aspiring veterinarians--particularly the women--in all types of institutions were more likely to name one of the biological sciences (e.g., biology, biochemistry, zoology) as their probable major than any other field of study (Table VI-19). Health technology (probably an inappropriate major for anyone planning to get a degree in veterinary medicine) was named by 5.4 percent of university entrants, 6.6 percent of four-year college entrants, and 8.9 percent of two-year college entrants, with men outnumbering women in this choice. From one in five students in two-year

FIGURE VI-6

Institutional Attendance Patterns for 1974 and 1972 Aspiring Veterinarians, by Sex, by Race, and by Parental Income

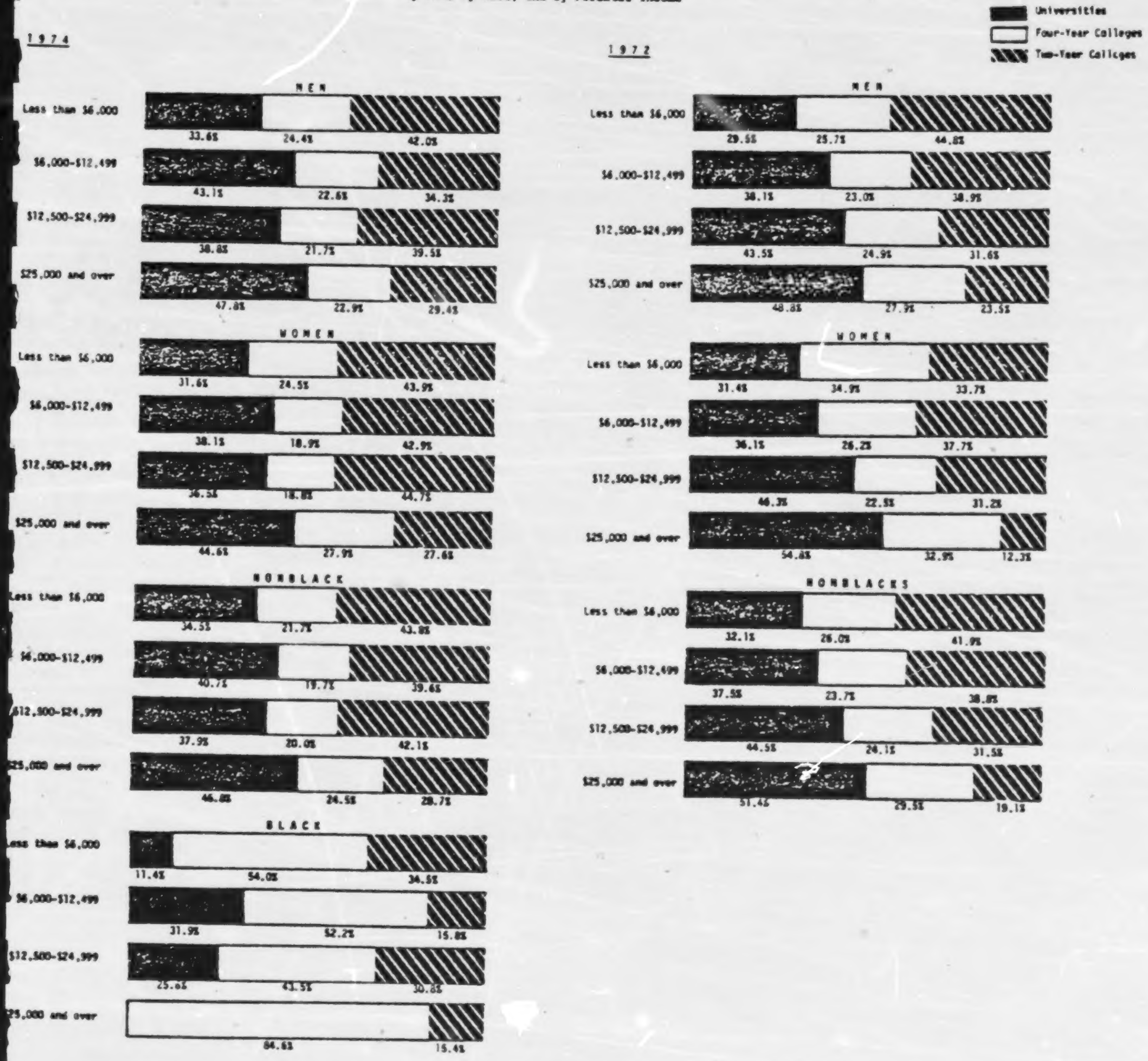


FIGURE VI-7

Institutional Attendance Patterns for 1974 and 1972 Aspiring Veterinarians, by Race and Sex, and by Parental Income

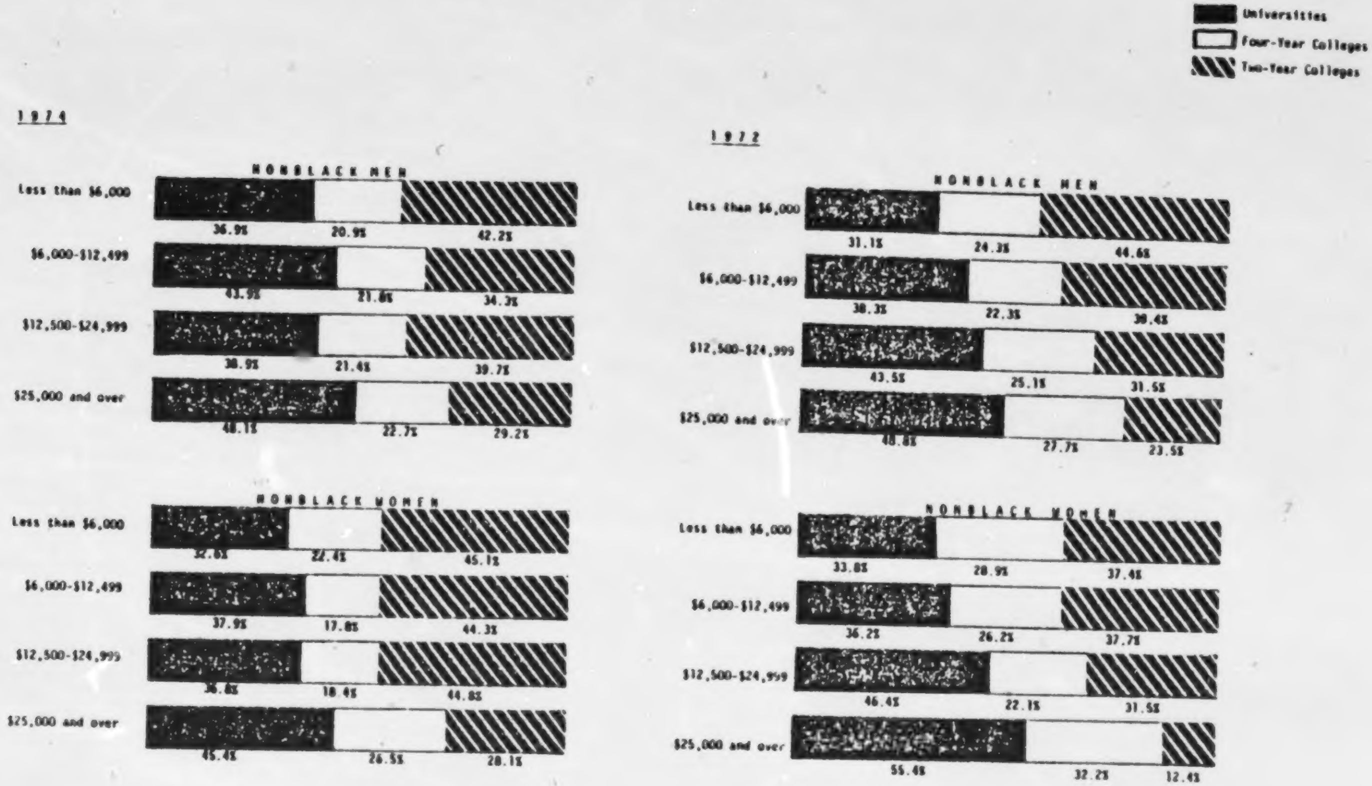


Table VI-19

Probable Study Field Major, by Race and Sex and by Institutional Type--1974 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University:									
Biological sciences	31.0	---	31.2	40.1	---	40.3	35.5	57.3	35.7
Health technology	7.3	---	7.2	3.6	---	3.6	5.4	4.2	5.4
Nursing	--	---	--	--	---	--	--	--	--
Pharmacy	--	---	--	.2	---	.2	.1	--	.1
Therapy	--	---	--	.2	---	.2	.1	--	.1
Other health fields	32.1	---	32.0	32.0	---	31.9	32.0	26.7	32.0
Total health fields	70.4	---	70.4	76.1	---	76.2	73.1	88.2	73.3
Total nonhealth fields	29.6	---	29.7	23.9	---	23.8	26.9	11.8	26.7
Four-Year College:									
Biological sciences	48.1	---	48.8	64.0	---	64.1	56.0	65.3	56.5
Health technology	9.6	---	9.4	3.7	---	3.7	6.7	4.2	6.6
Nursing	--	---	--	--	---	--	--	--	--
Pharmacy	--	---	--	.0	---	.0	.0	--	.0
Therapy	--	---	--	.0	---	.0	.0	--	.0
Other health fields	21.9	---	21.3	22.0	---	21.6	21.9	13.8	21.5
Total health fields	79.6	---	79.5	89.7	---	89.4	84.6	83.3	84.6
Total nonhealth fields	20.4	---	20.5	10.3	---	10.6	15.4	16.7	15.4
Two-Year College:									
Biological sciences	40.7	---	40.4	41.0	---	32.5	36.2	29.9	36.1
Health technology	10.4	---	10.2	7.6	---	7.9	8.9	10.4	8.9
Nursing	--	---	--	--	---	--	--	--	--
Pharmacy	--	---	--	.0	---	.0	.0	--	.0
Therapy	--	---	--	.0	---	.0	.0	--	.0
Other health fields	27.2	---	26.7	19.1	---	19.2	22.7	16.9	22.6
Total health fields	78.3	---	77.3	67.7	---	59.6	67.8	57.2	67.6
Total nonhealth fields	21.7	---	22.7	32.3	---	40.4	32.2	42.8	32.4

and four-year colleges to about one in three of those in universities said they planned to major in some other health field. A sizable proportion--26.7 percent in universities, 15.4 percent in four-year colleges and 32.4 percent in two-year colleges--planned to major in a nonhealth field. This category includes agriculture, a field in which 16.5 percent of the total group of aspiring veterinarians said they would major. Except for health technology, then, major field choices seem generally consistent with career plans.

Aspiring veterinarians in all types of institutions were more likely to name one of the sciences as their probable major field of study than any other field. In universities, however, other health fields and nonhealth fields were also more often named as majors, probably because of the wider course offerings in that type of institution.

In four-year institutions, women were much more likely to choose biological sciences as their major than were men (64.1 percent versus 48.8 percent) and in two-year institutions, women were more likely to choose nonhealth majors (40.4 percent versus 22.7 percent). Blacks in two-year institutions were the most likely to choose nonhealth majors (42.8 percent) and least likely to choose biology (29.9 percent). In both universities and four-year institutions, five or six out of ten blacks named biological science as their probable major while less than two in ten named nonhealth fields.

The number of schools of veterinary medicine in the United States is very small (around 20), most of them in state universities. Therefore, it is not surprising that most aspiring veterinarians, regardless of the type of institution in which they originally enrolled, said they expected to transfer to another institution before graduation (Table VI-20). The proportion expecting to transfer was highest at four-year colleges (65.4 percent) and lowest at universities (43.3 percent). Only 46.5 percent of those initially entering two-year colleges said that they expected to transfer, with men being more likely to state this intention than

Table VI-20

Proportion Likely to Transfer to Another College,[a] by Race and Sex and by Institutional Type--1974 Aspiring Veterinarians

	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
University	40.1	---	40.2	46.7	---	46.5	43.3	38.0	43.3
Four-year college	66.9	---	66.5	65.1	---	64.3	66.0	54.3	65.4
Two-year college	60.9	---	59.8	34.9	---	34.9	46.9	17.0	46.5

[a] Proportion indicating that there was "some chance" or "a very good chance" that they would transfer to another college before graduating.

women (59.8 percent versus 34.9 percent) and nonblacks than blacks (46.9 percent versus 17 percent). The implication of these findings is that many students entering two-year colleges (and perhaps a good many entering four-year colleges and universities as well) either aim no higher than becoming technical assistants or are unaware of the academic requirements involved in becoming a veterinarian.

This inference is not substantiated, however, by the degree plans of the aspiring veterinarians (Table VI-21). About four in

Table VI-21

Degree Plans, by Race and Sex, and by Type of Institution--1974 Aspiring Veterinarians

1974 Degree Plans	Men			Women			Total		
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total
Universities									
Bachelor's	4.1	---	4.1	5.9	---	6.0	5.0	10.6	5.0
Master's	3.7	---	3.7	4.9	---	4.8	4.3	.0	4.3
Ph.D. or Ed.D.	7.0	---	6.9	5.4	---	5.3	6.2	.0	6.1
Medical degree	82.5	---	82.6	81.6	---	81.7	82.1	89.4	82.1
Other	2.7	---	2.7	2.2	---	2.2	2.4	.0	2.5
Four-Year Colleges									
Bachelor's	5.4	---	5.6	6.5	---	6.2	5.9	5.3	5.9
Master's	4.5	---	5.1	6.1	---	6.1	5.3	11.0	5.6
Ph.D. or Ed.D.	6.9	---	7.5	6.3	---	7.9	6.6	26.1	7.7
Medical Degree	81.3	---	79.8	78.7	---	77.6	80.0	57.6	78.7
Other	1.9	---	2.0	2.4	---	2.2	2.2	.0	2.1
Two-Year Colleges									
Bachelor's	4.9	---	6.2	10.7	---	10.9	7.8	57.0	8.5
Master's	7.0	---	7.1	3.2	---	3.2	5.2	6.9	5.2
Ph.D. or Ed.D.	4.9	---	5.2	4.7	---	4.6	4.8	13.8	4.9
Medical Degree	76.9	---	75.3	65.7	---	65.7	71.3	22.3	70.6
Other	6.3	---	6.2	15.7	---	15.6	10.9	.0	10.8

five of those entering four-year colleges and universities, and seven in ten of those entering two-year colleges, said they intended to earn a medical degree (a category which includes Doctor of Veterinary Medicine). The only sex difference occurred among two-year college entrants: 75.3 percent of the men, but only 65.7 percent of the women, said they planned to get a medical degree. The racial/ethnic difference was much stronger, especially at two-year colleges, where seven in ten of the nonblacks aspired to a D.V.M., compared with only 22.3 percent of the blacks, more than half of whom intended to get no more than the bachelor's degree. Thus, as was the case with other aspiring health professionals, there are serious discrepancies between educational and career plans of these students.

Career Choice

When asked to indicate what reasons were very important in their career choice, aspiring veterinarians, like other entering freshmen, most frequently mentioned intrinsic interest in the field and the chance to be helpful to others (Table VI-22). These two reasons were cited by larger proportions of veterinarians (82.2 percent and 70.4 percent, respectively) than of freshmen-in-general (67.4 percent and 61.8 percent, respectively). Three in five of the total freshman class also mentioned ability to work with people, but this reason was cited by only two in five aspiring veterinarians. Instead, they gave precedence to making an important contribution to society (endorsed by 56.2 percent) and having a good deal of independence (55.1 percent).

Blacks were more likely than nonblacks to check a number of reasons as very important to them (just as they tended to give high priority to more life goals than did nonblacks). In particular, they gave more emphasis to such practical considerations as the chance for steady progress (68.7 percent versus 41.9 percent of the nonblacks), the availability of job openings (55 percent versus 43.5 percent), rapid career advancement (35.4 percent versus 24.1 percent), and high anticipated earnings (45.8 percent versus 36 percent).

Men were more inclined than women to mention materialistic and status-related reasons for their career choice (e.g., high anticipated earnings, rapid career advancement, the prestige of the pro-

Table VI-22

Reason[a] for Career Choice, by Race and Sex--1974 Aspiring Veterinarians

	Men			Women			Total			National Norms
	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	Nonblacks	Blacks	Total	
Job openings generally available	40.5	---	40.8	46.4	---	46.6	43.5	55.0	43.8	46.8
Rapid career advancement possible	29.0	---	29.1	19.3	---	19.8	24.1	35.4	24.3	34.8
High anticipated earnings	45.8	---	45.9	26.5	---	26.8	36.0	45.8	36.3	41.7
Well-respected or prestigious occupation	34.8	---	34.5	26.0	---	26.2	30.3	28.1	30.3	32.2
Great deal of independence	60.4	---	60.5	49.7	---	49.9	54.9	61.7	55.1	41.1
Chance for steady progress	43.2	---	44.1	40.6	---	40.9	41.9	68.7	42.5	48.7
Can make an important contribution to society	51.3	---	51.3	60.7	---	60.9	56.1	62.0	56.2	47.2
Can avoid pressure	18.9	---	18.7	15.1	---	15.3	16.9	19.2	17.[illegible]	17.0
Can work with ideas	31.1	---	31.7	35.0	---	35.3	33.1	51.8	33.5	44.1
Can be helpful to others	65.0	---	65.3	75.1	---	75.3	70.1	80.3	70.4	61.8
Able to work with people	42.2	---	42.4	39.1	---	39.1	40.6	45.1	40.7	61.3
Intrinsic interest in the field	79.7	---	79.4	86.2	---	86.2	83.0	75.8	82.8	67.4

[a] Reason indicated as "very important."

fession), while women tended to stress altruistic reasons (e.g., the opportunity to be helpful to others, to contribute to society) and their intrinsic interest in the field as major reasons for their career choice.

Parental income was related to reasons for career choice only among blacks (Table VI-23). Those from low-income families were more likely to mention the chance for steady progress, whereas those from high-income families gave greater emphasis to the profession's prestige and autonomy.

Summary

Like the four health professions already discussed, veterinary medicine gained in popularity as a career choice among women and blacks over the eight years studied. The increase in the number of women was far more dramatic than that in the number of blacks; indeed, in 1974, aspiring veterinarians were the only group where women finally outnumbered the men. Although the numbers and proportions of blacks and of other racial/ethnic minorities rose between 1966 and 1972, the growth rate was much lower. In short, whatever its attractiveness to nonblack women, veterinary medicine as a career choice did not attract minority students who seemed to be more interested in medicine and dentistry.

In their demographic and background characteristics, aspiring veterinarians were similar to other aspiring health professionals. They came from more affluent backgrounds than did

Table VI-23

Reasons[a] for Career Choice, by Race, by Sex, and by Income Level--1974 Aspiring Veterinarians

	Men	Women	Nonblacks	Blacks
Job openings generally available:				
Less than $6,000	39.1	48.5	41.1	55.1
$6,000 - $12,499	42.9	47.6	44.9	59.5
$12,500 - $24,999	40.3	46.8	43.1	58.2
$25,000 and over	39.8	42.7	41.5	71.7
Rapid career advancement possible:				
Less than $6,000	37.7	28.9	32.7	34.0
$6,000 - $12,499	25.9	20.1	22.7	28.3
$12,500 - $24,999	30.4	17.3	23.0	38.2
$25,000 and over	27.1	21.6	24.5	21.2
High anticipated earnings:				
Less than $6,000	39.0	30.7	32.9	49.8
$6,000 - $12,499	43.4	23.7	33.0	37.4
$12,500 - $24,999	47.0	20.9	38.3	54.1
$25,000 and over	40.3	28.5	37.6	46.1
Well-respected or prestigious occupation:				
Less than $6,000	28.4	27.4	27.9	17.6
$6,000 - $12,499	34.6	22.5	28.5	22.6
$12,500 - $24,999	34.5	28.2	31.5	36.4
$25,000 and over	33.1	31.1	31.9	50.8
Great deal of independence:				
Less than $6,000	57.7	54.2	57.1	42.7
$6,000 - $12,499	57.4	47.5	51.6	70.1
$12,500 - $24,999	58.3	47.1	53.7	44.3
$25,000 and over	66.0	56.4	60.6	78.6
Chance for steady progress:				
Less than $6,000	51.6	48.7	47.7	72.9
$6,000 - $12,499	42.0	36.5	38.5	57.7
$12,500 - $24,999	44.4	39.8	41.8	79.7
$25,000 and over	43.6	48.4	44.4	53.0
Can make an important contribution to society:				
Less than $6,000	51.5	70.2	59.4	83.0
$6,000 - $12,499	51.3	58.6	53.4	57.5
$12,500 - $24,999	52.5	63.6	58.0	37.7
$25,000 and over	50.9	60.3	56.2	79.4
Can avoid pressure:				
Less than $6,000	16.0	21.9	18.1	29.7
$6,000 - $12,499	21.5	14.8	18.1	12.9
$12,500 - $24,999	15.6	14.5	15.2	16.6
$25,000 and over	19.0	11.3	18.4	.6
Can work with ideas:				
Less than $6,000	29.1	35.9	30.0	60.6
$6,000 - $12,499	31.2	36.4	32.7	57.9
$12,500 - $24,999	32.0	38.6	33.7	39.9
$25,000 and over	30.2	38.7	30.0	60.4
Can be helpful to others:				
Less than $6,000	63.2	76.5	69.0	86.2
$6,000 - $12,499	67.4	72.6	69.6	89.2
$12,500 - $24,999	63.4	70.8	69.8	65.1
$25,000 and over	68.8	74.0	69.5	95.0
Able to work with people:				
Less than $6,000	50.4	45.8	44.9	78.3
$6,000 - $12,499	38.3	38.0	38.3	32.6
$12,500 - $24,999	42.6	40.2	41.6	23.8
$25,000 and over	41.6	35.2	38.5	35.7
Intrinsic interest in the field:				
Less than $6,000	78.4	80.6	80.0	75.9
$6,000 - $12,499	81.7	85.4	83.4	92.9
$12,500 - $24,999	77.8	85.3	81.5	62.4
$25,000 and over	79.2	87.5	83.4	69.5

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[a] Reason indicated as "very important."

freshmen-in-general, although they were less affluent than were aspiring physicians and dentists. As with other groups of health professionals, black aspiring veterinarians reported substantially lower median parental incomes than did nonblacks. Finally, the women tended to have more highly educated parents (particularly mothers) than did the men.

The three most common expected sources of finance for the freshman year of college were parental support, earnings from part-time or summer work, and savings. Blacks were more likely to participate in federal student aid programs, and to receive larger amounts of support from such programs, than were nonblacks. Nonetheless, the considerable proportion who expressed major concern over their ability to pay for a college education suggests that these sources may not be adequate.

Aspiring veterinarians manifested more confidence in their own abilities than most freshmen but had a somewhat less glowing self-image than did aspiring physicians and dentists. In general, the blacks in the group were more self-assured with respect to social abilities and less so with respect to academic and mathematical abilities. Aspiring veterinarians gave priority to the same life goals as most other aspiring health professionals except that they were less likely to value helping others in difficulty. They were particularly likely to say that being successful in their own business was very important to them.

The institutional attendance patterns of aspiring veterinarians seemed to be more closely related to parental income than to either race/ethnicity or sex, with lower-income students being more likely than higher-income students to enter two-year colleges. Generally, their educational plans (probable major field of study, probability of transfer, and degree plans) were consistent with their career aspirations, although those who initially enrolled in two-year institutions may find it difficult to realize those plans because of the delays often involved in transfer.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Just over 7 percent of all first-time, full-time freshmen in 1966, 1972, and 1974 said that they planned to go into one of the health professions (medicine, dentistry, pharmacy, optometry, and veterinary medicine) as a long-term career. The choice of physician was consistently the most popular, attracting about half the aspiring health professionals in each year studied. In 1974, veterinarian and dentist ranked next, followed by pharmacists. Relatively few students named optometrist as their freshman career choice.

Except for veterinary medicine, the health professions attracted a predominantly male and nonblack group of students in 1974, as they had in 1966. Since 1966, however, the number of women interested in the health professions has increased much more than has the number of men; indeed, in the case of medicine and dentistry, the number of men registered a slight decline. Thus, by 1974, half the aspiring veterinarians, nearly two-fifths of the aspiring pharmacists, one-third of the aspiring physicians, and three-tenths of the aspiring optometrists and dentists were women. The health professions, especially medicine and dentistry, also became increasingly attractive to blacks and other minority-group members over the eight-year period, though they remained a tiny fraction of the total.

The General View

The following section gives a general view of aspiring health professionals, comparing the five career groups with one another and with freshmen-in-general in terms of major characteristics.

Demographic and Socioeconomic Characteristics

- Like most freshmen, the majority of aspiring health professionals were 18 years old at college entry. Blacks were somewhat more likely than were nonblacks to be either younger or older than the modal age of 18. Women were more likely than were men to be age 17 or younger, with the exception of aspiring optometrists: About one in five of both sexes in this career group were 19 or older when they entered college.
- The vast majority of aspiring health professionals entered college directly after high school graduation, though blacks were somewhat more likely than were nonblacks to have delayed entry. Larger proportions of aspiring optometrists and veterinarians than of the other career groups (though fewer than was the case for freshmen-in-general) delayed college entry by a year or more after high school graduation.
- As was true of freshmen-in-general, the vast majority of aspiring health professionals were single at college entry. Most reported that they were seeing one person exclusively or were dating several people. Black women planning on a career in dentistry were most likely to be married.

- Except for aspiring pharmacists, the median parental incomes reported by aspiring health professionals were higher than the median for freshmen-in-general. The five groups of aspiring health professionals, in order of affluence (as measured by 1973 median parental income) were physicians, dentists, veterinarians, optometrists, and pharmacists. Moreover, the proportion of parental income expected to go for support in the first year of college ranged from a high of 9 percent for aspiring physicians to a low of 6 percent for aspiring dentists.

- Nonblacks came from markedly wealthier backgrounds than did blacks. Men came from slightly wealthier backgrounds than did women in four of the five career groups. Among aspiring pharmacists, however, women reported higher median parental incomes than did men.

- Nonblack men aspiring to become physicians were the most affluent of the subgroups, and black women aspiring to become pharmacists were the least affluent. Nonblack aspiring health professionals, with the exception of men aspiring to pharmacy and women aspiring to optometry, came from higher-income homes than did freshmen-in-general, whereas blacks came from families whose incomes were well below the norm.

- Aspiring health professionals were more likely than were freshmen-in-general to have college-educated parents, the exception being aspiring pharmacists. As with all freshmen, the fathers of nonblacks tended to be better educated than the mothers, though this difference did not hold for blacks. Nonblacks generally had better-educated parents than blacks. Sex differences were not consistent, however: In most cases, men had better-educated parents than did women, but nonblack women among aspiring pharmacists were much more likely than were their male counterparts to report that their parents had at least a baccalaureate.

- Aspiring health professionals were more likely than were freshmen-in-general to have fathers who worked in the health professions. Aspiring optometrists and physicians (especially the nonblack men) were more likely than were others to report that their fathers were in the same health profession as the one to which they aspired. Aspiring physicians were more likely than were other career groups to report that their fathers worked in high-level occupations (the professions, business management, education), and aspiring pharmacists the least likely.

College Choice and Finances

- Aspiring health professionals were more likely than were freshmen-in-general to enroll in universities, where the likelihood of their majoring in a study field congruent with their career plans was higher. Enrollment patterns varied greatly, however, by sex and by race as well as by income. Thus, nonblack men from highly affluent backgrounds were the most likely group to enroll in private universities. Larger proportions of blacks than of nonblacks enrolled in private four-year colleges, a category that includes most predominantly black institutions. Women, particularly those from less affluent backgrounds, were the most likely to enroll in public two-year colleges, where the difficulties of finding a study field appropriate to their freshman career goals and the delays often involved in transferring to a baccalaureate-granting institution increased the likelihood that they would lower their career aspirations and possibly end up in nursing or the allied health professions (especially health technology) rather than in the health profession that was their freshman choice.

- In choosing an institution, most aspiring health professionals were strongly influenced by the academic reputation of the college they attended. In addition, blacks were more likely than were nonblacks to cite low tuition and the offer of financial assistance as very important factors in their college choice, and women and blacks were more likely than were men and nonblacks to cite the special programs offered by the institution.
- Aspiring health professionals were less likely than were freshmen-in-general to claim financial independence from their parents. Blacks were considerably more likely than were nonblacks to be financially independent, but the sex

differences in financial independence were not consistent. The great majority of all five career groups, as well as of freshmen-in-general, said they would get support from their parents to finance their college education, though the amounts expected varied considerably, being highest for aspiring physicians and lowest for aspiring pharmacists.

- Parental aid was the most common source of financial support for virtually all subgroups in all five career choices. Overall, the second and third most common sources of support were earnings from part-time or summer employment and savings. There were, however, strong racial/ethnic differences with respect to the proportions of students naming a given source of support. Thus, nonblacks were twice as likely as blacks to cite savings and somewhat more likely to cite earnings from part-time or summer employment. Blacks were about three times as likely as nonblacks to participate in the federal student aid programs, notably College Work-Study, BEOG, and SEOG. There were no clear-cut patterns with respect to the proportions relying on state scholarships, local or private scholarships, and loans. In the case of this last category, some groups expected to incur very heavy indebtedness: as much as $1,500 to finance the first year of college.
- Overall, aspiring health professionals were more likely than were freshmen-in-general to express major concern over their

ability to pay for a college education. Blacks were, however, twice as likely as nonblacks to express such concern.

Self-Ratings

- Although there was considerable variation by sex and by racial/ethnic category as well as by career group, aspiring health professionals were somewhat more confident about themselves than were freshmen-in-general. Aspiring physicians and dentists had the most favorable self-image, consistently rating themselves above average or in the top 10 percent on a larger number of positive traits than did aspirants in the three other career groups or all freshmen.
- The "top three" traits for all groups of aspiring health professionals, as well as for freshmen-in-general, were understanding of others, drive to achieve, and academic ability. In addition, larger proportions of aspiring health professionals than of all freshmen rated themselves high on the following traits: academic ability, drive to achieve, mathematical ability, mechanical ability, intellectual self-confidence, and leadership. Thus, it is chiefly in the realm of achievement-oriented traits that aspiring health professionals were inclined to see themselves as outstanding.
- Larger proportions of men than of women among aspiring health professionals rated themselves high on mechanical ability, athletic ability, mathematical ability, public speaking

ability, leadership ability, and intellectual self-confidence. Somewhat surprisingly, men were also more likely than women to see themselves as physically attractive, popular, popular with the opposite sex, and socially self-confident. (The chief exception to these generalizations occurred among aspiring pharmacists: The women were more apt than the men to give themselves high ratings on most of these traits.) On the other hand, larger proportions of women than of men among aspiring health professionals regarded themselves as cheerful, understanding, artistic, stubborn, and defensive.

- Generally, blacks among aspiring health professionals were somewhat more likely than were nonblacks to rate themselves high on public speaking ability, physical attractiveness, popularity with the opposite sex, social self-confidence, cheerfulness, and defensiveness, but slightly less likely to be confident of their academic, mathematical, and mechanical abilities.

Life Goals

- On only two life goals did all five groups of aspiring health professionals differ consistently from freshmen-in-general: They were more likely to say that it was essential or very important to them to succeed in a business of their own and to make a theoretical contribution to science.

- Looking at the sexes separately, we find that men and women aspiring to the health professions differed from their counterparts in the total freshman class on other goals. Generally, the male aspiring health professional was more likely than was the average male freshman to give high priority to helping others in difficulty, raising a family, becoming an authority in his field of specialization, being very well-off financially, and participating in a community action program. He was less likely than was the average male freshman to value having administrative responsibility for the work of others, becoming accomplished in one of the performing arts, writing original works, creating works of art such as painting and sculpture, influencing the political structure, and cleaning up the environment.
- Comparisons between women aspiring to the health professions and the average female freshman are more complicated, because there was considerable variation by career group. If raising a family is labeled a traditionally feminine goal, then it may be concluded that women planning to become optometrists or dentists were more traditional in their values than the average female freshman; women planning to become pharmacists were about the same, and women planning to become physicians or veterinarians were markedly below the norm, suggesting a rejection of typically "feminine" values. Further, women interested in medicine as a career

consistently gave higher priority to life goals that may be considered traditionally masculine: succeeding in their own business, obtaining recognition from colleagues, becoming an authority in their field. Thus, of all five groups of women aspiring to the health professions, they appeared to be the most strikingly unconventional in their life goals, followed by aspiring veterinarians and pharmacists. Women interested in optometry were the most traditional of all five groups, and those interested in dentistry were the next most traditional.

- Certain sex differences emerged within each career group. Generally, men were more likely than were women to emphasize such materialistic and status-oriented goals as being very well-off financially, succeeding in their own business, winning recognition from colleagues, becoming an authority in their field, and having administrative responsibility over others. (The most consistent exceptions occurred among aspiring pharmacists: Women in that career group were somewhat more concerned than were men with achievement and success.) Women generally gave higher priority to helping others in difficulty, developing a meaningful philosophy of life, and creating artistic works. All these sex differences held true for freshmen-in-general as well as for aspiring health professionals.

- Larger proportions of blacks than of nonblacks endorsed most of the life goals, suggesting that they have a more expressive or flamboyant response (and life?) style. This tendency was particularly marked on the following goals: making a theoretical contribution to science, obtaining recognition from colleagues, participating in community action programs, being very well-off financially, and having administrative responsibility over others. In the case of aspiring pharmacists, however, these last two goals were more likely to be rated as very important by nonblacks than by blacks.

Reasons for Career Choice

- Aspiring health professionals were generally more likely than were freshmen-in-general to cite as very important in their career choice the following factors: the opportunity to make an important contribution to society, the opportunity to be helpful to others, the ability to work with people, high earnings, the prestige of the profession, and the opportunity for independence. There were, however, exceptions: Relatively few aspiring pharmacists cited altruistic reasons or the opportunity for independence; relatively few aspiring veterinarians mentioned ability to work with people, the prestige of the profession, or high earnings; and relatively few aspiring physicians were concerned with high earnings.
- In addition to variations by career group, there were

differences by sex and by racial/ethnic category. Larger proportions of men than of women cited materialistic and status-connected reasons, with male aspiring pharmacists being particularly concerned with such factors. Blacks were more likely than were nonblacks to mention the opportunity for autonomy and for steady progress offered by their chosen career. On the whole, then, aspiring health professionals were a competent, self-assured, and achievement-oriented group of students whose goals and values were congruent with their career choices.

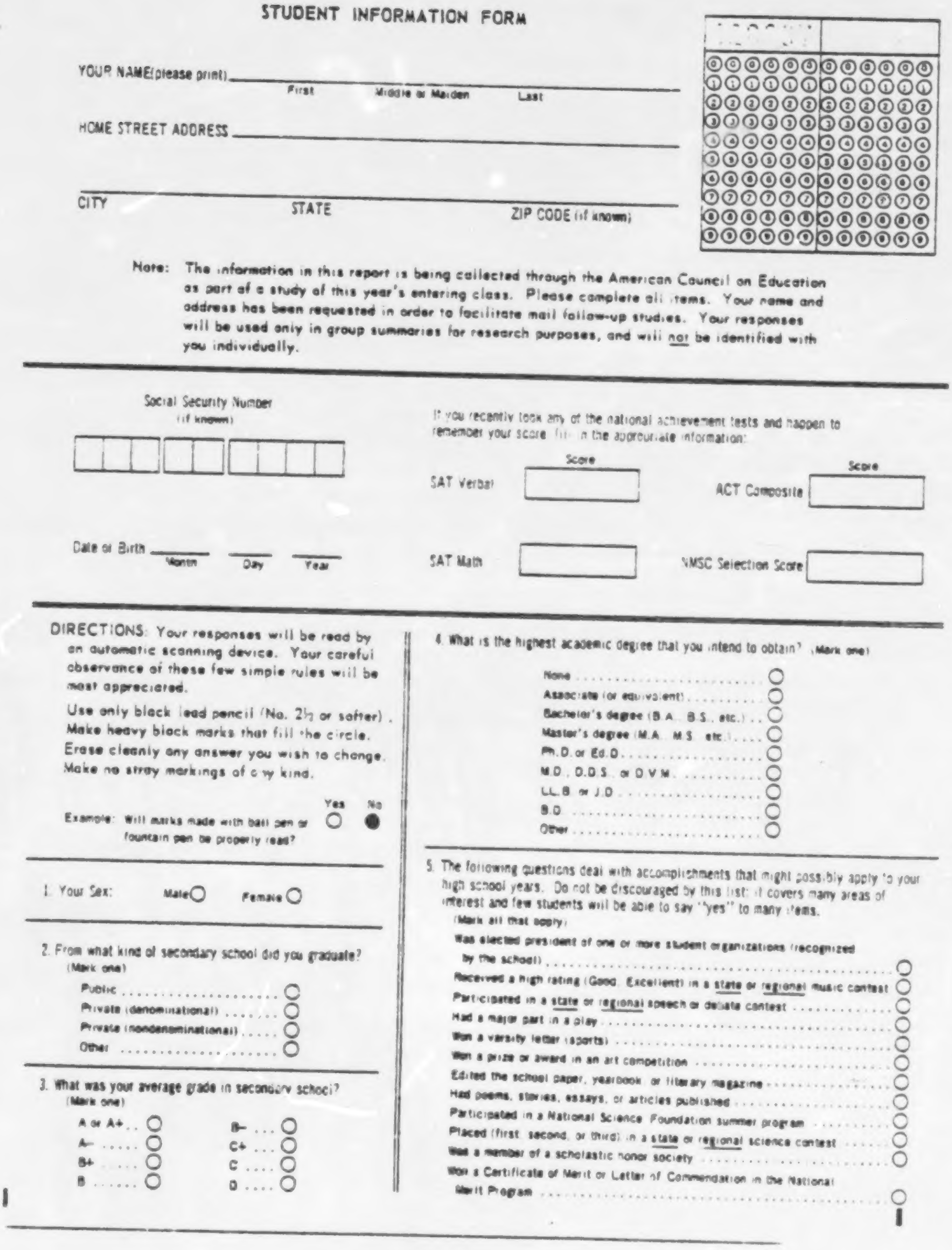
A Final Word

As was noted in Chapter I, the five groups of health professionals were defined on the basis of the career choices they named as entering freshmen, and freshman career choices are highly subject to change during the college years. To some degree, such changes are beyond the control of policy-makers and institutional officials; they are often the inevitable result of changes in the students themselves as they come--though the combined effects of growing up and being exposed to new experiences--to define more clearly their own interests and abilities, to become better acquainted with the occupational prospects open to them, and to recognize more fully the exigencies of the job market.

But in other cases, changes in career goals are forced upon them. They may suddenly be made aware that the educational requirements of the career they named as freshmen are far more demanding and time-consuming than they had initially realized, that the institution they enrolled in simply does not offer courses appropriate for them or that the transfer process involves delays that they simply cannot afford. There is ample evidence in the present study that many freshmen make unrealistic career choices, choices that simply do not agree with their probable study field majors, degree aspirations, and plans to transfer. The inescapable conclusion is that these students simply lack adequate information about their chosen career. The discrepancies between career goals and educational plans were particularly apparent among students entering two-year colleges and among certain groups of nonblack women (for instance, many of those who said they wanted to become dentists or optometrists). It may be that some of these students simply misunderstood the career choice item on the freshman survey questionnaire and checked, for instance, "dentist" when the career they really had in mind was "dental hygienist." Whatever the explanation, such discrepancies suggest a surprising lack of sophistication about occupations on the part of some students--a deficiency that should be corrected in high school.

In addition, career counseling services (in combination with regular academic advising) for freshmen should be established or expanded to help those students who are uncertain about the requirements of their profession and who need guidance in planning their educational paths, choosing appropriate major study fields, and taking the courses that will enable them to realize their freshman career goals. These two initiatives--better occupational information at the high school level, better counseling at the college freshman level--might do much to help students set realistic goals, take the steps necessary to implement them, and fulfill their aspirations without waste, confusion, and disappointments.

APPENDIX A: STUDENT INFORMATION FORM, 1966



STUDENT INFORMATION FORM

YOUR NAME(please print) ______________________
First Middle or Maiden Last

HOME STREET ADDRESS ______________________

____
CITY STATE ZIP CODE (if known)

0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9

Note: The information in this report is being collected through the American Council on Education as part of a study of this year's entering class. Please complete all items. Your name and address has been requested in order to facilitate mail follow-up studies. Your responses will be used only in group summaries for research purposes, and will not be identified with you individually.

Social Security Number
(if known)

☐☐☐ ☐☐ ☐☐☐☐

Date of Birth ______ ______ ______
Month Day Year

If you recently took any of the national achievement tests and happen to remember your score fill in the appropriate information:

	Score		Score
SAT Verbal	☐	ACT Composite	☐
SAT Math	☐	NMSC Selection Score	☐

DIRECTIONS: Your responses will be read by an automatic scanning device. Your careful observance of these few simple rules will be most appreciated.

Use only black lead pencil (No. 2½ or softer). Make heavy black marks that fill the circle. Erase cleanly any answer you wish to change. Make no stray markings of any kind.

Example: Will marks made with ball pen or fountain pen be properly read? Yes ○ No ●

1. Your Sex: Male ○ Female ○

2. From what kind of secondary school did you graduate? (Mark one)
   - Public .... ○
   - Private (denominational) .... ○
   - Private (nondenominational) ..... ○
   - Other .... ○

3. What was your average grade in secondary school? (Mark one)

A or A+ ..	○	B– ...	○
A–	○	C+ ...	○
B+	○	C	○
B	○	D	○

4. What is the highest academic degree that you intend to obtain? (Mark one)
   - None .... ○
   - Associate (or equivalent) .... ○
   - Bachelor's degree (B.A., B.S., etc.) .. ○
   - Master's degree (M.A., M.S., etc.) .... ○
   - Ph.D. or Ed.D. .... ○
   - M.D., D.D.S., or D.V.M. .... ○
   - LL.B. or J.D. .... ○
   - B.D. .... ○
   - Other .... ○

5. The following questions deal with accomplishments that might possibly apply to your high school years. Do not be discouraged by this list; it covers many areas of interest and few students will be able to say "yes" to many items. (Mark all that apply)
   - Was elected president of one or more student organizations (recognized by the school) .... ○
   - Received a high rating (Good, Excellent) in a state or regional music contest ○
   - Participated in a state or regional speech or debate contest .... ○
   - Had a major part in a play .... ○
   - Won a varsity letter (sports) .... ○
   - Won a prize or award in an art competition .... ○
   - Edited the school paper, yearbook, or literary magazine .... ○
   - Had poems, stories, essays, or articles published .... ○
   - Participated in a National Science Foundation summer program .... ○
   - Placed (first, second, or third) in a state or regional science contest .... ○
   - Was a member of a scholastic honor society .... ○
   - Won a Certificate of Merit or Letter of Commendation in the National Merit Program .... ○

6. Do you have any concern about your ability to finance your college education? (Mark one)

None (I am confident that I will have sufficient funds) ○
Some concern (but I will probably have enough funds) ○
Major concern (not sure I will be able to complete college) ○

7. Through what source do you intend to finance the first year of your undergraduate education?
(Mark one for each item)

	Major Source	Minor Source	Not a Source
Employment during college	○	○	○
Employment during summer	○	○	○
Scholarship	○	○	○
G. I. Bill	○	○	○
Personal savings	○	○	○
Tuition deferment loan from college	○	○	○
Parental aid	○	○	○
Federal government	○	○	○
Commercial loan	○	○	○

8. What is your racial background? (Mark one)

Caucasian ○
Negro ○
American Indian ○
Oriental ○
Other ○

9. What is the highest level of formal education obtained by your parents? (Mark one in each column)

	Father	Mother
Grammar school or less	○	○
Some high school	○	○
High school graduate	○	○
Some college	○	○
College degree	○	○
Postgraduate degree	○	○

10. What is your best estimate of the total income last year of your parental family (not your own family if you are married)? Consider annual income from all sources before taxes.

Less than $4,000 ○
$4,000–$5,999 ○
$6,000–$7,999 ○
$8,000–$9,999 ○
$10,000–$14,999 ○
$15,000–$19,999 ○
$20,000–$24,999 ○
$25,000–$29,999 ○
$30,000 or more ○

11. Mark one in each column below:

	Religion in Which You Were Reared	Your Present Religious Preference
Protestant	○	○
Roman Catholic	○	○
Jewish	○	○
Other	○	○
None	○	○

12. In deciding where to go to college, through what source did this college first come to your attention?
(Mark one)

Relative ○
Friend ○
High school counselor or teacher ○
Professional counseling or college placement service ○
This college or a representative from this college ○
Other source ○
I cannot recall ○

13. To what extent do you think each of the following describes the psychological climate or atmosphere at this college?
(Mark one answer for each item)

	Very Descriptive	In Between	Not at all Descriptive
Intellectual	○	○	○
Snobbish	○	○	○
Social	○	○	○
Victorian	○	○	○
Practical-minded	○	○	○
Warm	○	○	○
Realistic	○	○	○
Liberal	○	○	○

14. Answer each of the following as you think it applies to this college:

	Yes	No
The students are under a great deal of pressure to get high grades	○	○
The student body is apathetic and has little "school spirit"	○	○
Most of the students are of a very high calibre academically	○	○
There is a keen competition among most of the students for high grades	○	○
Freshmen have to take orders from upperclassmen for a period of time	○	○
There isn't much to do except to go to class and study	○	○
I felt "lost" when I first came to the campus	○	○
Being in this college builds poise and maturity	○	○
Athletics are overemphasized	○	○
The classes are usually run in a very informal manner	○	○
Most students are more like "numbers in a book"	○	○

15. Are you:

An only child (Mark and skip to number 20) ○
The first-born (but not an only child) ○
The second-born ○
The third-born ○
Fourth (or later) born ○

16. How many brothers and sisters now living do you have? (Mark one)

None (Mark and skip to number 20) ○

1	2	3	4	5	6	7	8 or more
○	○	○	○	○	○	○	○

17. Mark one circle for each of your brothers and sisters between the ages of 13 and 23

	13	14	15	16	17	18	19	20	21	22	23
Brothers	○	○	○	○	○	○	○	○	○	○	○
Sisters	○	○	○	○	○	○	○	○	○	○	○

18. Are you a twin? (Mark one)

No. (Mark and skip to number 20) ○
Yes, identical ○
Yes, fraternal same sex ○
Yes, fraternal opposite sex ○

19. Is your twin attending college?

No ○
Yes, the same college ○
Yes, a different college ○

20.
Mark one in each column:

	Your current home state	Your birthplace	Your father's birthplace	Your mother's birthplace
Alabama	○	○	○	○
Alaska	○	○	○	○
Arizona	○	○	○	○
Arkansas	○	○	○	○
California	○	○	○	○
Colorado	○	○	○	○
Connecticut	○	○	○	○
Delaware	○	○	○	○
D. C.	○	○	○	○
Florida	○	○	○	○
Georgia	○	○	○	○
Hawaii	○	○	○	○
Idaho	○	○	○	○
Illinois	○	○	○	○
Indiana	○	○	○	○
Iowa	○	○	○	○
Kansas	○	[illegible]	[illegible]	○
Kentucky	○	[illegible]	[illegible]	○
Louisiana	○	○	○	○
Maine	○	○	○	○
Maryland	○	○	○	○
Massachusetts	○	○	○	○
Michigan	○	○	○	○
Minnesota	○	○	○	○
Mississippi	○	○	○	○
Missouri	○	○	○	○
Montana	○	○	○	○
Nebraska	○	○	○	○
Nevada	○	○	○	○
New Hampshire	○	○	○	○
New Jersey	○	○	○	○
New Mexico	○	○	○	○
New York	○	○	○	○
North Carolina	○	○	○	○
North Dakota	○	○	○	○
Ohio	○	○	○	○
Oklahoma	○	○	○	○
Oregon	○	○	○	○
Pennsylvania	○	○	○	○
Rhode Island	○	○	○	○
South Carolina	○	○	○	○
South Dakota	○	○	○	○
Tennessee	○	○	○	○
Texas	○	○	○	○
Utah	○	○	○	○
Vermont	○	○	○	○
Virginia	○	○	○	○
Washington	○	○	○	○
West Virginia	○	○	○	○
Wisconsin	○	○	○	○
Wyoming	○	○	○	○
Latin America	○	○	○	○
Europe	○	○	○	○
Africa	○	○	○	○
Asia	○	○	○	○
Other	○	○	○	○

21. Below is a list of 66 different undergraduate major fields grouped into general categories.
Mark only three of the 66 fields as follows:

① First choice (your probable major field of study).
② Second choice.
Ⓛ The field of study which is least appealing to you.

Arts and Humanities

Architecture	①	②	Ⓛ
English (literature)	①	②	Ⓛ
Fine arts	①	②	Ⓛ
History	①	②	Ⓛ
Journalism (writing)	①	②	Ⓛ
Language (modern)	①	②	Ⓛ
Language (other)	①	②	Ⓛ
Music	①	②	Ⓛ
Philosophy	①	②	Ⓛ
Speech and drama	①	②	Ⓛ
Theology	①	②	Ⓛ
Other	①	②	Ⓛ

Biological Science

Biology (general)	①	②	Ⓛ
Biochemistry	①	②	Ⓛ
Biophysics	①	②	Ⓛ
Botany	①	②	Ⓛ
Zoology	①	②	Ⓛ
Other	①	②	Ⓛ

Business

Accounting	①	②	Ⓛ
Business admin.	①	②	Ⓛ
Electronic data processing	①	②	Ⓛ
Secretarial studies	①	②	Ⓛ
Other	①	②	Ⓛ

Engineering

Aeronautical	①	②	Ⓛ
Civil	①	②	Ⓛ
Chemical	①	②	Ⓛ
Electrical	①	②	Ⓛ
Industrial	①	②	Ⓛ
Mechanical	①	②	Ⓛ
Other	①	②	Ⓛ

Physical Science

Chemistry	①	②	Ⓛ
Earth science	①	②	Ⓛ
Mathematics	①	②	Ⓛ
Physics	①	②	Ⓛ
Statistics	①	②	Ⓛ
Other	①	②	Ⓛ

Professional

Health Technology (medical, dental, laboratory)	①	②	Ⓛ
Nursing	①	②	Ⓛ
Pharmacy	①	②	Ⓛ
Predentistry	①	②	Ⓛ
Prelaw	①	②	Ⓛ
Premedical	①	②	Ⓛ
Preveterinary	①	②	Ⓛ
Therapy (occupat., physical, speech)	①	②	Ⓛ
Other	①	②	Ⓛ

Social Science

Anthropology	①	②	Ⓛ
Economics	①	②	Ⓛ
Education	①	②	Ⓛ
History	①	②	Ⓛ
Political science (government, int. relations)	①	②	Ⓛ
Psychology	①	②	Ⓛ
Social work	①	②	Ⓛ
Sociology	①	②	Ⓛ
Other	①	②	Ⓛ

Other Fields

Agriculture	①	②	Ⓛ
Communications (radio, T. V., etc.)	①	②	Ⓛ
Electronics (technology)	①	②	Ⓛ
Forestry	①	②	Ⓛ
Home economics	①	②	Ⓛ
Industrial arts	①	②	Ⓛ
Library science	①	②	Ⓛ
Military science	①	②	Ⓛ
Physical education and recreation	①	②	Ⓛ
Other (technical)	①	②	Ⓛ
Other (nontechnical)	①	②	Ⓛ
Undecided	①	②	Ⓛ

Please be sure that only three circles have been marked in the above list.

22. Probable Career Occupation

Note:
Make only three responses, one in each column
① First Choice
② Second Choice
Ⓛ Least Appealing

Accountant or actuary	①	②	Ⓛ
Actor or entertainer	①	②	Ⓛ
Architect	①	②	Ⓛ
Artist	①	②	Ⓛ
Business (clerical)	①	②	Ⓛ
Business executive (management, administrator)	①	②	Ⓛ
Business owner or proprietor	①	②	Ⓛ
Business salesman or buyer	①	②	Ⓛ
Clergyman (minister, priest)	①	②	Ⓛ
Clergy (other religious)	①	②	Ⓛ
Clinical psychologist	①	②	Ⓛ
College teacher	①	②	Ⓛ
Computer programmer	①	②	Ⓛ
Conservationist or forester	①	②	Ⓛ
Dentist (including orthodontist)	①	②	Ⓛ
Dietitian or home economist	①	②	Ⓛ
Engineer	①	②	Ⓛ
Farmer or rancher	①	②	Ⓛ
Foreign service worker (including diplomat)	①	②	Ⓛ
Housewife	①	②	Ⓛ
Interior decorator (including designer)	①	②	Ⓛ
Interpreter (translator)	①	②	Ⓛ
Lab technician or hygienist	①	②	Ⓛ
Law enforcement officer	①	②	Ⓛ
Lawyer (attorney)	①	②	Ⓛ
Military service (career)	①	②	Ⓛ
Musician (performer, composer)	①	②	Ⓛ
Nurse	①	②	Ⓛ
Optometrist	①	②	Ⓛ
Pharmacist	①	②	Ⓛ
Physician	①	②	Ⓛ
School counselor	①	②	Ⓛ
School principal or superintendant	①	②	Ⓛ
Scientific researcher	①	②	Ⓛ
Social worker	①	②	Ⓛ
Statistician	①	②	Ⓛ
Therapist (physical, occupational, speech)	①	②	Ⓛ
Teacher (elementary)	①	②	Ⓛ
Teacher (secondary)	①	②	Ⓛ
Veterinarian	①	②	Ⓛ
Writer or journalist	①	②	Ⓛ
Skilled trades	①	②	Ⓛ
Other	①	②	Ⓛ
Undecided	①	②	Ⓛ

23. Below is a general list of things that students sometimes do. Indicate which of these things you did during the past year in school. If you engaged in an activity frequently, Mark "f." If you engaged in an activity one or more times, but not frequently, Mark "o" (occasionally). Mark "n" (not at all) if you have not performed the activity during the past year. (Mark one for each item)

	Frequently	Occasionally	Not at all
Voted in a student election	Ⓕ	Ⓞ	Ⓝ
Came late to class	Ⓕ	Ⓞ	Ⓝ
Listened to New Orlean's (Dixieland) jazz	Ⓕ	Ⓞ	Ⓝ
Gambled with cards or dice	Ⓕ	Ⓞ	Ⓝ
Played a musical instrument	Ⓕ	Ⓞ	Ⓝ
Took a nap or rest during the day	Ⓕ	Ⓞ	Ⓝ
Drove a car	Ⓕ	Ⓞ	Ⓝ
Stayed up all night	Ⓕ	Ⓞ	Ⓝ
Studied in the library	Ⓕ	Ⓞ	Ⓝ
Attended a ballet performance	Ⓕ	Ⓞ	Ⓝ
Participated on the speech or debate team	Ⓕ	Ⓞ	Ⓝ
Acted in plays	Ⓕ	Ⓞ	Ⓝ
Sang in a choir or glee club	Ⓕ	Ⓞ	Ⓝ
Argued with other students	Ⓕ	Ⓞ	Ⓝ
Called a teacher by his or her first name	Ⓕ	Ⓞ	Ⓝ
Wrote an article for the school paper or literary magazine	Ⓕ	Ⓞ	Ⓝ
Had a blind date	Ⓕ	Ⓞ	Ⓝ
Wrote a short story or poem (not for a class)	Ⓕ	Ⓞ	Ⓝ
Played in a school band	Ⓕ	Ⓞ	Ⓝ
Played in a school orchestra	Ⓕ	Ⓞ	Ⓝ
Smoked cigarettes	Ⓕ	Ⓞ	Ⓝ
Attended Sunday school	Ⓕ	Ⓞ	Ⓝ
Checked out a book or journal from the school library	Ⓕ	Ⓞ	Ⓝ
Went to the movies	Ⓕ	Ⓞ	Ⓝ
Discussed how to make money with other students	Ⓕ	Ⓞ	Ⓝ
Said grace before meals	Ⓕ	Ⓞ	Ⓝ
Prayed (not including grace before meals)	Ⓕ	Ⓞ	Ⓝ
Listened to folk music	Ⓕ	Ⓞ	Ⓝ
Attended a public recital or concert	Ⓕ	Ⓞ	Ⓝ
Made wisecracks in class	Ⓕ	Ⓞ	Ⓝ
Arranged a date for another student	Ⓕ	Ⓞ	Ⓝ
Went to an over-night or week-end party	Ⓕ	Ⓞ	Ⓝ
Took weight-reducing or dietary formula	Ⓕ	Ⓞ	Ⓝ
Drank beer	Ⓕ	Ⓞ	Ⓝ
Overslept and missed a class or appointment	Ⓕ	Ⓞ	Ⓝ
Typed a homework assignment	Ⓕ	Ⓞ	Ⓝ
Participated in an informal group sing	Ⓕ	Ⓞ	Ⓝ
Drank wine	Ⓕ	Ⓞ	Ⓝ
Cribbed on an examination	Ⓕ	Ⓞ	Ⓝ
Turned in a paper or theme late	Ⓕ	Ⓞ	Ⓝ
Tried on clothes in a store without buying anything	Ⓕ	Ⓞ	Ⓝ
Asked questions in class	Ⓕ	Ⓞ	Ⓝ
Attended church	Ⓕ	Ⓞ	Ⓝ
Participated in organized demonstrations	Ⓕ	Ⓞ	Ⓝ

24. Indicate the importance to you personally of each of the following: (Mark one for each item)

	Essential	Very Important	Somewhat Important	Not Important
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an authority on a special subject in my subject field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Obtaining recognition from my colleagues for contributions in my special field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an accomplished musician (performer or composer)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an expert in finance and commerce	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having administrative responsibility for the work of others	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being very well-off financially	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Helping others who are in difficulty	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Participating in an organization like the Peace Corps or Vista	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an outstanding athlete	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming a community leader	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Making a theoretical contribution to science	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Writing original works (poems, novels, short stories, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Never being obligated to people	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Creating artistic work (painting, sculpture, decorating, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Keeping up to date with political affairs	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being successful in a business of my own	Ⓔ	Ⓥ	Ⓢ	Ⓝ

25. Rate yourself on each of the following traits as you really think you are when compared with the average student of your own age. We want the most accurate estimate of how you see yourself. (Mark one for each item)

Trait	Highest 10 Percent	Above Average	Average	Below Average	Lowest 10 Percent
Academic ability	○	○	○	○	○
Athletic ability	○	○	○	○	○
Artistic ability	○	○	○	○	○
Cheerfulness	○	○	○	○	○
Defensiveness	○	○	○	○	○
Drive to achieve	○	○	○	○	○
Leadership ability	○	○	○	○	○
Mathematical ability	○	○	○	○	○
Mechanical ability	○	○	○	○	○
Originality	○	○	○	○	○
Political conservatism	○	○	○	○	○
Political liberalism	○	○	○	○	○
Popularity	○	○	○	○	○
Popularity with the opposite sex	○	○	○	○	○
Public speaking ability	○	○	○	○	○
Self-confidence (intellectual)	○	○	○	○	○
Self-confidence (social)	○	○	○	○	○
Sensitivity to criticism	○	○	○	○	○
Stubbornness	○	○	○	○	○
Understanding of others	○	○	○	○	○
Writing ability	○	○	○	○	○

26. How old will you be on December 31 of this year? (Mark one)

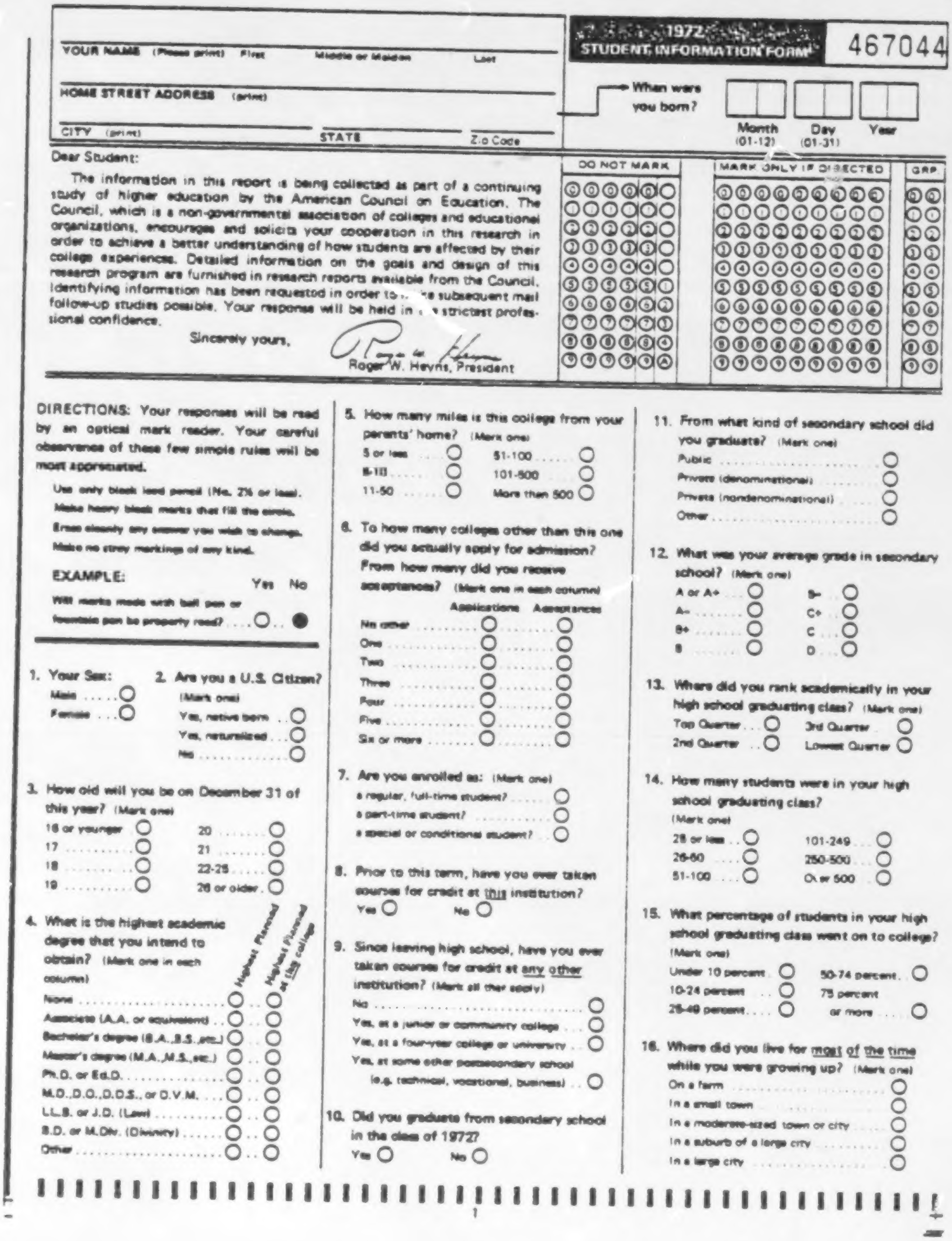
- 16 or younger ○
- 17 ○
- 18 ○
- 19 ○
- 20 ○
- 21 ○
- Older than 21 ○

27. (If you are married, omit the following question) What is your best guess as to the chances that you will marry

	While in College?	Within a Year after College?
Very good chance	○	○
Some chance	○	○
Very little chance	○	○
No chance	○	○

Prepared by American Council on Education 1785 Massachusetts Ave., N.W. Washington, D.C.

APPENDIX B: STUDENT INFORMATION FORM, 1972



1972 STUDENT INFORMATION FORM 467044

YOUR NAME (Please print) First Middle or Maiden Last

HOME STREET ADDRESS (print)

CITY (print) STATE Zip Code

When were you born? Month (01-12) Day (01-31) Year

DO NOT MARK

MARK ONLY IF DIRECTED

GRP.

Dear Student:

The information in this report is being collected as part of a continuing study of higher education by the American Council on Education. The Council, which is a non-governmental association of colleges and educational organizations, encourages and solicits your cooperation in this research in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Council. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

Sincerely yours,

Roger W. Heyns

Roger W. Heyns, President

DIRECTIONS: Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.

Use only black lead pencil (No. 2½ or less).
Make heavy black marks that fill the circle.
Erase cleanly any answer you wish to change.
Make no stray markings of any kind.

EXAMPLE: Yes No
Will marks made with ball pen or fountain pen be properly read? ... ○ .. ●

1. Your Sex:
   - Male ..... ○
   - Female ... ○

2. Are you a U.S. Citizen? (Mark one)
   - Yes, native born .. ○
   - Yes, naturalized ... ○
   - No .... ○

3. How old will you be on December 31 of this year? (Mark one)
   - 16 or younger ○
   - 17 .... ○
   - 18 .... ○
   - 19 .... ○
   - 20 .... ○
   - 21 .... ○
   - 22-25 ..... ○
   - 26 or older . ○

4. What is the highest academic degree that you intend to obtain? (Mark one in each column)

	Highest Planned	Highest Planned at this college
None	○	○
Associate (A.A. or equivalent)	○	○
Bachelor's degree (B.A., B.S., etc.)	○	○
Master's degree (M.A., M.S., etc.)	○	○
Ph.D. or Ed.D.	○	○
M.D., D.O., D.D.S., or D.V.M.	○	○
LL.B. or J.D. (Law)	○	○
B.D. or M.Div. (Divinity)	○	○
Other	○	○

5. How many miles is this college from your parents' home? (Mark one)
   - 5 or less ..... ○
   - 6-10 ..... ○
   - 11-50 ..... ○
   - 51-100 ..... ○
   - 101-500 ..... ○
   - More than 500 ○

6. To how many colleges other than this one did you actually apply for admission? From how many did you receive acceptances? (Mark one in each column)

	Applications	Acceptances
No other	○	○
One	○	○
Two	○	○
Three	○	○
Four	○	○
Five	○	○
Six or more	○	○

7. Are you enrolled as: (Mark one)
   - a regular, full-time student? ..... ○
   - a part-time student? ..... ○
   - a special or conditional student? .. ○

8. Prior to this term, have you ever taken courses for credit at this institution?
   Yes ○ No ○

9. Since leaving high school, have you ever taken courses for credit at any other institution? (Mark all that apply)
   - No ..... ○
   - Yes, at a junior or community college ... ○
   - Yes, at a four-year college or university .. ○
   - Yes, at some other postsecondary school (e.g. technical, vocational, business) .. ○

10. Did you graduate from secondary school in the class of 1972?
    Yes ○ No ○

11. From what kind of secondary school did you graduate? (Mark one)
    - Public ..... ○
    - Private (denominational) ..... ○
    - Private (nondenominational) ..... ○
    - Other ..... ○

12. What was your average grade in secondary school? (Mark one)
    - A or A+ ... ○
    - A- ..... ○
    - B+ ..... ○
    - B ..... ○
    - B- .. ○
    - C+ .. ○
    - C ... ○
    - D ... ○

13. Where did you rank academically in your high school graduating class? (Mark one)
    - Top Quarter ... ○
    - 2nd Quarter .. ○
    - 3rd Quarter ○
    - Lowest Quarter ○

14. How many students were in your high school graduating class? (Mark one)
    - 25 or less .. ○
    - 26-50 .... ○
    - 51-100 .... ○
    - 101-249 ... ○
    - 250-500 ... ○
    - Over 500 .. ○

15. What percentage of students in your high school graduating class went on to college? (Mark one)
    - Under 10 percent . ○
    - 10-24 percent .. ○
    - 25-49 percent .... ○
    - 50-74 percent .. ○
    - 75 percent or more .... ○

16. Where did you live for most of the time while you were growing up? (Mark one)
    - On a farm ..... ○
    - In a small town ..... ○
    - In a moderate-sized town or city ..... ○
    - In a suburb of a large city ..... ○
    - In a large city ..... ○

1

17. Which applies to you? (Mark one)

Presently married ○
Presently engaged ○
Have been seeing one person exclusively ○
Have been dating, but no one steadily ○
Have not been dating in recent months ○

18. Do you have any concern about your ability to finance your college education? (Mark one)

None (I am confident that I will have sufficient funds) ○
Some concern (but I will probably have enough funds) ○
Major concern (not sure I will have enough funds to complete college) ○

19. For each item below, indicate its importance as a source for financing your education. (Mark one answer for each item)

	Major Source	Minor Source	Not a Source
Part-time or summer work	○	○	○
Savings from full-time employment	○	○	○
Spouse's employment	○	○	○
Parental or family aid or gifts	○	○	○
Federal benefits from parent's military service	○	○	○
G.I. benefits from your military service	○	○	○
Scholarships and grants	○	○	○
NDEA loans, federally insured loans, or college loans	○	○	○
Other repayable loans	○	○	○

20. What is your best estimate of the total income last year of your parents (not your own family, if you are married)? **Consider annual income from all sources before taxes.** (Mark one)

Less than $3,000	○	$15,000-$19,999	○
$3,000-$3,999	○	$20,000-$24,999	○
$4,000-$5,999	○	$25,000-$29,999	○
$6,000-$7,999	○	$30,000-$34,999	○
$8,000-$9,999	○	$35,000-$39,999	○
$10,000-$12,499	○	$40,000-$49,999	○
$12,500-$14,999	○	$50,000 or more	○

21. What is the highest level of formal education obtained by your parents and (if married) by your spouse? (Mark one in each column)

	Father	Mother	Spouse
Grammar school or less	○	○	○
Some high school	○	○	○
High school graduate	○	○	○
Some college	○	○	○
College degree	○	○	○
Some graduate school	○	○	○
Graduate degree	○	○	○
(Not married)			○

22. Mark one in each row:

	Jewish	Protestant	Roman Catholic	Other	None
Religion in which mother was reared.	○	○	○	○	○
Religion in which father was reared.	○	○	○	○	○
Religion in which you were reared	○	○	○	○	○
Your present religious preference	○	○	○	○	○

23. Which of the following is currently true about your parents? (Mark one)

Both alive and married to each other ○
Both alive and divorced or separated ○
One or both parents deceased ○

24. Are your parents employed at present? (Mark one in each column)

	Father	Mother
Yes, full-time	○	○
Yes, part-time	○	○
No, but was in the past.	○	○
No, and never was	○	○

25. How would you characterize your political views? (Mark one)

Far left ○
Liberal ○
Middle-of-the-road ○
Conservative ○
Far right ○

26. Below is a list of statements on a wide range of topics that may or may not apply to you. Mark all items to which you are able to answer "yes".

	Yes
I have been employed for at least a year while not in school	○
I have won a prize or award in an art competition	○
I have had poems, stories, essays, or articles published	○
During the past year I:	
played a musical instrument	○
attended religious services	○
participated in an organized demonstration	○
visited an art gallery or museum	○
smoked cigarettes regularly	○
drank beer	○
had vocational counseling	○
worked in a local, state, or national political campaign	○
While in high school I:	
was a member of a scholastic honor society	○
won a varsity letter in basketball or football	○
won a varsity letter in another sport	○
edited the high school paper, yearbook, or literary magazine	○

27. What is: (Mark one in each column)

Ⓨ Your probable future occupation?
Ⓕ Your father's current occupation?
Ⓜ Your mother's current occupation?
Ⓢ Your spouse's current occupation, if married?

NOTE: If your father or mother is deceased or retired, please indicate his or her last occupation.

Accountant or actuary	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Actor or entertainer	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Architect	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Artist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Business (clerical)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Business executive (manager, administrator)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Business owner or proprietor	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Business salesman or buyer	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Clergy (rabbi, minister, priest)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Clergy (other religious)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Clinical psychologist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
College teacher	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Computer programmer	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Conservationist or forester	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Dentist (including orthodontist)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Dietitian or home economist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Engineer	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Farmer or rancher	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Foreign service worker (including diplomat)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Homemaker (full-time)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Interior decorator (including designer)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Interpreter (translator)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Lab technician or hygienist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Law enforcement officer	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Lawyer (attorney)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Military service (career)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Musician (performer, composer)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Nurse	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Optometrist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Pharmacist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Physician	Ⓨ	Ⓕ	Ⓜ	Ⓢ
School counselor	Ⓨ	Ⓕ	Ⓜ	Ⓢ
School principal / superintendent	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Scientific researcher	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Social worker	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Statistician	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Therapist (physical, occupational, speech)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Teacher (elementary)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Teacher (secondary)	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Veterinarian	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Writer or journalist	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Skilled trades	Ⓨ	Ⓕ	Ⓜ	Ⓢ
Other	Ⓨ			
Undecided	Ⓨ			
Laborer (unskilled)		Ⓕ	Ⓜ	Ⓢ
Semi-skilled worker		Ⓕ	Ⓜ	Ⓢ
Other occupation		Ⓕ	Ⓜ	Ⓢ
Unemployed		Ⓕ	Ⓜ	Ⓢ
Student				Ⓢ

28. Are you a veteran? (Mark one)

No ○
Yes, I served in Southeast Asia ○
Yes, but I did not serve in Southeast Asia ○

29. Are you: (Mark all that apply.)

White/Caucasian ○
Black/Negro/Afro-American ○
American Indian ○
Oriental ○
Mexican-American/Chicano ○
Puerto Rican-American ○
Other ○

30. The following is a list of several ethnic groups. The list is not intended to be all-inclusive; if no response seems appropriate, mark "none of above apply."

(Mark one in each column)

	Father's Ethnic Group	Mother's Ethnic Group	Your Ethnic Identity (if any)
Canadian	○	○	○
English/Scotch/Welsh	○	○	○
Greek	○	○	○
Italian	○	○	○
Irish	○	○	○
Latin American/Spanish	○	○	○
Polish	○	○	○
Russian or other Slavic	○	○	○
Scandinavian	○	○	○
None of above apply	○	○	○

31. Mark one in each row: { Agree strongly / Agree somewhat / Disagree somewhat / Disagree strongly

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
The Federal government is not doing enough to control environmental pollution	○	○	○	○
The Federal government is not doing enough to protect the consumer from faulty goods and services	○	○	○	○
The Federal government is not doing enough to promote school desegregation	○	○	○	○
There is too much concern in the courts for the rights of criminals	○	○	○	○
As long as they work hard, people should be paid equally regardless of ability or quality of work	○	○	○	○
The activities of married women are best confined to the home and family	○	○	○	○
Wealthy people should pay a larger share of taxes than they do now	○	○	○	○
Marijuana should be legalized	○	○	○	○
Parents should be discouraged from having large families	○	○	○	○
Women should receive the same salary and opportunities for advancement as men in comparable positions	○	○	○	○
Realistically, an individual can do little to bring about changes in our society	○	○	○	○

32. Mark one in each row: { Agree strongly / Agree somewhat / Disagree somewhat / Disagree strongly

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
College officials have the right to regulate student behavior off campus	○	○	○	○
The chief benefit of a college education is that it increases one's earning power	○	○	○	○
Faculty promotions should be based in part on student evaluations	○	○	○	○
College grades should be abolished	○	○	○	○
Colleges would be improved if organized sports were de-emphasized	○	○	○	○
Student publications should be cleared by college officials	○	○	○	○
College officials have the right to ban persons with extreme views from speaking on campus	○	○	○	○
Students from disadvantaged social backgrounds should be given preferential treatment in college admissions	○	○	○	○
Most college officials have been too lax in dealing with student protests on campus	○	○	○	○
Open admissions (admitting anyone who applies) should be adopted by all publicly-supported colleges	○	○	○	○
Even if it employs open admissions, a college should use the same performance standards in awarding degrees to all students	○	○	○	○

33. What is your best guess as to the chances that you will: (Mark one for each item)

	Very Good Chance	Some Chance	Very Little Chance	No Chance
Change major field?	○	○	○	○
Change career choice?	○	○	○	○
Fail one or more courses?	○	○	○	○
Graduate with honors?	○	○	○	○
Be elected to a student office?	○	○	○	○
Join a social fraternity, sorority, or club?	○	○	○	○
Be elected to an academic honor society?	○	○	○	○
Make at least a "B" average?	○	○	○	○
Need extra time to complete your degree requirements?	○	○	○	○
Have to work at an outside job during college?	○	○	○	○
Seek vocational counseling?	○	○	○	○
Seek individual counseling on personal problems?	○	○	○	○
Enroll in honors courses?	○	○	○	○
Get a bachelor's degree (B.A., B.S., etc.)?	○	○	○	○
Drop out of this college temporarily (exclude transferring)?	○	○	○	○
Drop out permanently (exclude transferring)?	○	○	○	○
Transfer to another college before graduating?	○	○	○	○
Enter active duty in the armed services before completing college?	○	○	○	○
Be satisfied with your college?	○	○	○	○
Be more successful after graduation than most students attending this college?	○	○	○	○
Find a job after graduation in the field for which you were trained?	○	○	○	○
Get married while in college? (skip if married)	○	○	○	○
Get married within a year after college? (skip if married)	○	○	○	○
Adopt a child some day?	○	○	○	○

34. Do you feel that you will need any special help in any of the following subjects? (Mark all that apply)

English ○
Reading ○
Mathematics ○
Social Studies ○
Science ○
Foreign Language ○

35. Below is a list of 68 different undergraduate major fields grouped into general categories. Mark only one circle to indicate your probable field of study.

ARTS AND HUMANITIES
Architecture ○
English (literature) ○
Fine arts ○
History ○
Journalism (writing) ○
Language (modern) ○
Language (other) ○
Music ○
Philosophy ○
Speech and Drama ○
Theology ○
Other Arts and Humanities ○

BIOLOGICAL SCIENCE
Biology (general) ○
Biochemistry ○
Biophysics ○
Botany ○
Zoology ○
Other Biological Science ○

BUSINESS
Accounting ○
Business Admin. ○
Electronic Data Processing ○
Secretarial Studies ○
Other Business ○

ENGINEERING
Aeronautical ○
Civil ○
Chemical ○
Electrical ○
Industrial ○
Mechanical ○
Other Engineering ○

PHYSICAL SCIENCE
Chemistry ○
Earth Science ○
Mathematics ○
Physics ○
Statistics ○
Other Physical Science ○

PROFESSIONAL
Health Technology (medical, dental, laboratory) ○
Nursing ○
Pharmacy ○
Predentistry ○
Prelaw ○
Premedical ○
Preveterinary ○
Therapy (occupat., physical, speech) ○
Other Profession ○

SOCIAL SCIENCE
Anthropology ○
Economics ○
Education ○
History ○
Political Science (government, int. relations) ○
Psychology ○
Social Work ○
Sociology ○
Other Social Science ○

OTHER FIELDS
Agriculture ○
Communications (radio, T.V., etc.) ○
Computer Science ○
Environmental Science ○
Electronics (technology) ○
Forestry ○
Home Economics ○
Industrial Arts ○
Library Science ○
Military Science ○
Physical Education and Recreation ○
Other (technical) ○
Other (nontechnical) ○
Undecided ○

36. Indicate the importance to you personally of each of the following: (Mark one for each item)

	Essential	Very Important	Somewhat Important	Not Important
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an authority in my field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Obtaining recognition from my colleagues for contributions in my special field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing the political structure	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing social values	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Raising a family	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having an active social life	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having friends with different backgrounds and interests from mine	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an expert in finance and commerce	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having administrative responsibility for the work of others	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being very well-off financially	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Helping others who are in difficulty	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Participating in an organization like the Peace Corps or Vista	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming a community leader	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Making a theoretical contribution to science	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Writing original works (poems, novels, short stories, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Never being obligated to people	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Creating artistic work (painting, sculpture, decorating, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Keeping up to date with political affairs	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being successful in a business of my own	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming involved in programs to clean up the environment	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Developing a meaningful philosophy of life	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Participating in a community action program	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Getting married within the next five years (skip if married)	Ⓔ	Ⓥ	Ⓢ	Ⓝ

37. Below are some of the reasons that might have influenced your decision to attend this particular college. How important was each reason in deciding to come here? (Mark one answer for each statement)

	Very Important	Somewhat Important	Not Important
My relatives wanted me to come here	Ⓥ	Ⓢ	Ⓝ
I wanted to live away from home	Ⓥ	Ⓢ	Ⓝ
This college has a very good academic reputation	Ⓥ	Ⓢ	Ⓝ
This college has a good athletic program	Ⓥ	Ⓢ	Ⓝ
I was offered financial assistance	Ⓥ	Ⓢ	Ⓝ
Most of my friends are going to this college	Ⓥ	Ⓢ	Ⓝ
Because of low tuition	Ⓥ	Ⓢ	Ⓝ
Someone who had been here before advised me to go	Ⓥ	Ⓢ	Ⓝ
Because of the special educational programs offered	Ⓥ	Ⓢ	Ⓝ
I was not accepted anywhere else	Ⓥ	Ⓢ	Ⓝ
My guidance counselor advised me to go	Ⓥ	Ⓢ	Ⓝ
I wanted to live at home	Ⓥ	Ⓢ	Ⓝ

DIRECTIONS:

The remaining circles are provided for items specifically designed by your college, rather than by the American Council on Education. If your college has chosen to use the circles, observe carefully the supplemental directions given you.

38. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
39. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
40. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
41. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
42. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
43. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
44. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
45. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
46. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
47. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

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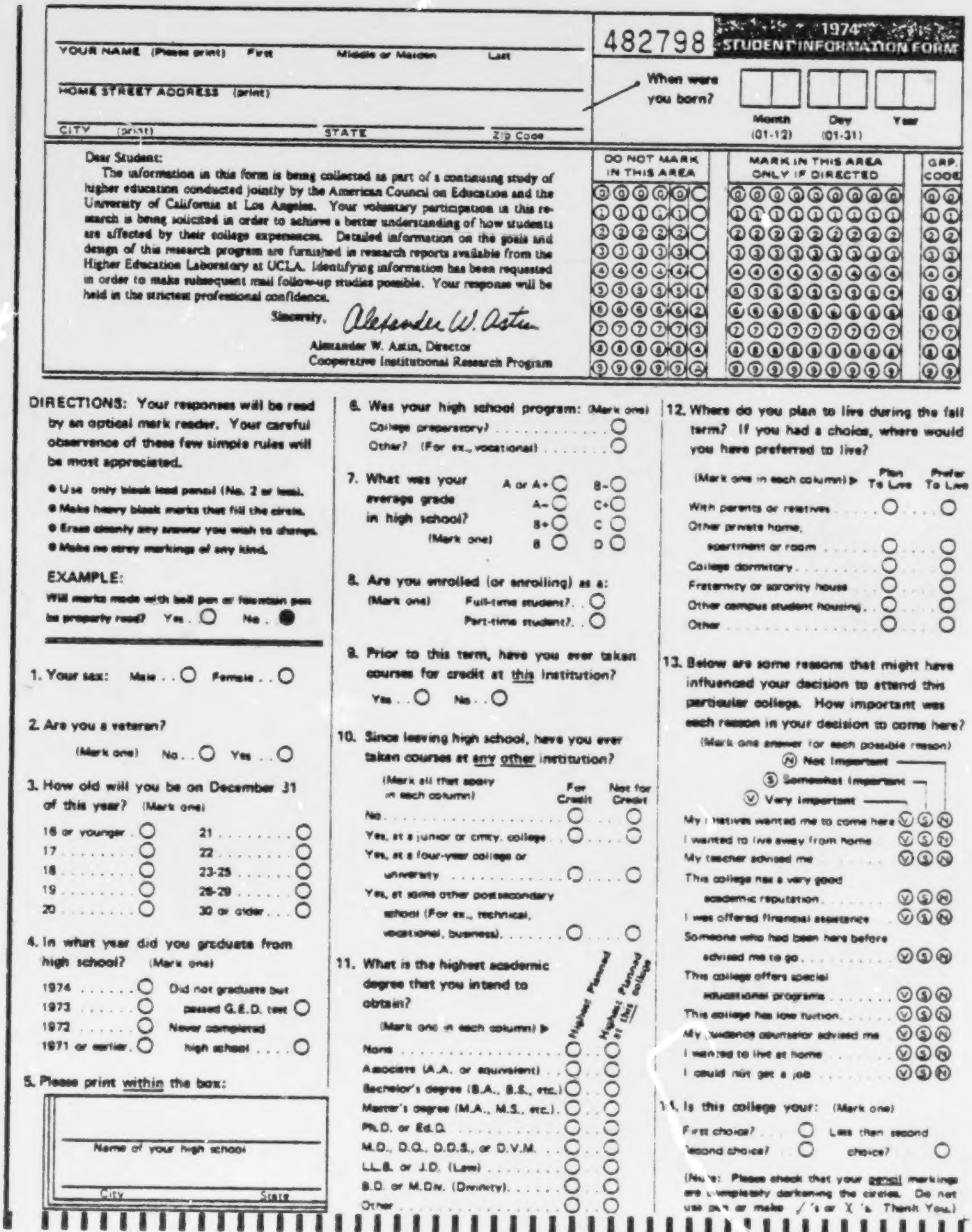
APPENDIX C: STUDENT INFORMATION FORM, 1974



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1974 STUDENT INFORMATION FORM

YOUR NAME (Please print) First ____ Middle or Maiden ____ Last ____

HOME STREET ADDRESS (print) ____

CITY (print) ____ STATE ____ Zip Code ____

When were you born? Month (01-12) ____ Day (01-31) ____ Year ____

DO NOT MARK IN THIS AREA

MARK IN THIS AREA ONLY IF DIRECTED

GRP. CODE

Dear Student:

The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your voluntary participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Higher Education Laboratory at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

Sincerely, Alexander W. Astin

Alexander W. Astin, Director
Cooperative Institutional Research Program

DIRECTIONS: Your responses will be read by an optical mark reader. Your careful observence of these few simple rules will be most appreciated.

- Use only black lead pencil (No. 2 or less).
- Make heavy black marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind.

EXAMPLE:

Will marks made with ball pen or fountain pen be properly read? Yes . ○ No . ●

1. Your sex: Male . . ○ Female . . ○

2. Are you a veteran? (Mark one) No . . ○ Yes . . ○

3. How old will you be on December 31 of this year? (Mark one)

16 or younger ○
17 ○
18 ○
19 ○
20 ○
21 ○
22 ○
23-25 ○
26-29 ○
30 or older ○

4. In what year did you graduate from high school? (Mark one)

1974 ○
1973 ○
1972 ○
1971 or earlier ○
Did not graduate but passed G.E.D. test ○
Never completed high school ○

5. Please print within the box:

Name of your high school ____

City ____ State ____

6. Was your high school program: (Mark one)

College preparatory? ○
Other? (For ex., vocational) ○

7. What was your average grade in high school? (Mark one)

A or A+ ○
A- ○
B+ ○
B ○
B- ○
C+ ○
C ○
D ○

8. Are you enrolled (or enrolling) as a: (Mark one) Full-time student? ○ Part-time student? ○

9. Prior to this term, have you ever taken courses for credit at this institution? Yes . . ○ No . . ○

10. Since leaving high school, have you ever taken courses at any other institution?

(Mark all that apply in each column)	For Credit	Not for Credit
No	○	○
Yes, at a junior or cmty. college	○	○
Yes, at a four-year college or university	○	○
Yes, at some other postsecondary school (For ex., technical, vocational, business)	○	○

11. What is the highest academic degree that you intend to obtain?

(Mark one in each column) ▶	Highest Planned	Highest Planned at this college
None	○	○
Associate (A.A. or equivalent)	○	○
Bachelor's degree (B.A., B.S., etc.)	○	○
Master's degree (M.A., M.S., etc.)	○	○
Ph.D. or Ed.D.	○	○
M.D., D.O., D.D.S., or D.V.M.	○	○
LL.B. or J.D. (Law)	○	○
B.D. or M.Div. (Divinity)	○	○
Other	○	○

12. Where do you plan to live during the fall term? If you had a choice, where would you have preferred to live?

(Mark one in each column) ▶	Plan To Live	Prefer To Live
With parents or relatives	○	○
Other private home, apartment or room	○	○
College dormitory	○	○
Fraternity or sorority house	○	○
Other campus student housing	○	○
Other	○	○

13. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

Ⓝ Not Important
Ⓢ Somewhat Important
Ⓥ Very Important

My relatives wanted me to come here	Ⓥ	Ⓢ	Ⓝ
I wanted to live away from home	Ⓥ	Ⓢ	Ⓝ
My teacher advised me	Ⓥ	Ⓢ	Ⓝ
This college has a very good academic reputation	Ⓥ	Ⓢ	Ⓝ
I was offered financial assistance	Ⓥ	Ⓢ	Ⓝ
Someone who had been here before advised me to go	Ⓥ	Ⓢ	Ⓝ
This college offers special educational programs	Ⓥ	Ⓢ	Ⓝ
This college has low tuition	Ⓥ	Ⓢ	Ⓝ
My guidance counselor advised me	Ⓥ	Ⓢ	Ⓝ
I wanted to live at home	Ⓥ	Ⓢ	Ⓝ
I could not get a job	Ⓥ	Ⓢ	Ⓝ

14. Is this college your: (Mark one)

First choice? ○
Second choice? ○
Less than second choice? ○

(Note: Please check that your pencil markings are completely darkening the circles. Do not use pen or make ✓'s or X's. Thank You.)

-1-

27. What is:

Ⓜ Your mother's current occupation?
Ⓕ Your father's current occupation?
Ⓨ Your probable future occupation?

(Mark one in each column. If your father or mother is deceased or retired, please indicate his or her last occupation.)

Accountant or auditor	Ⓨ	Ⓕ	Ⓜ
Architect or urban planner	Ⓨ	Ⓕ	Ⓜ
Artist (painting, sculpture, etc.)	Ⓨ	Ⓕ	Ⓜ
Business: banker or financier	Ⓨ	Ⓕ	Ⓜ
Business: buyer or purchasing agent	Ⓨ	Ⓕ	Ⓜ
Business: manager or administrator	Ⓨ	Ⓕ	Ⓜ
Business: owner or proprietor	Ⓨ	Ⓕ	Ⓜ
Business: public relations or advertising	Ⓨ	Ⓕ	Ⓜ
Business: sales worker	Ⓨ	Ⓕ	Ⓜ
Carpenter	Ⓨ	Ⓕ	Ⓜ
Clergy or religious worker	Ⓨ	Ⓕ	Ⓜ
Clerical worker: secretary, stenographer, typist, or bookkeeper	Ⓨ	Ⓕ	Ⓜ
Clerical worker: other	Ⓨ	Ⓕ	Ⓜ
Commercial artist, designer, decorator	Ⓨ	Ⓕ	Ⓜ
Computer programmer or analyst	Ⓨ	Ⓕ	Ⓜ
Construction craftsman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Counselor: guidance, family or school	Ⓨ	Ⓕ	Ⓜ
Dentist (incl. orthodontist)	Ⓨ	Ⓕ	Ⓜ
Draftsman	Ⓨ	Ⓕ	Ⓜ
Driver: truck, taxi or bus	Ⓨ	Ⓕ	Ⓜ
Electrician	Ⓨ	Ⓕ	Ⓜ
Engineer	Ⓨ	Ⓕ	Ⓜ
Factory worker, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Farm or ranch laborer	Ⓨ	Ⓕ	Ⓜ
Farm or ranch owner or manager	Ⓨ	Ⓕ	Ⓜ
Foreman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Forester, conservationist, fish or wildlife specialist	Ⓨ	Ⓕ	Ⓜ
Government official, administrator or politician	Ⓨ	Ⓕ	Ⓜ
Home economist or dietitian	Ⓨ	Ⓕ	Ⓜ
Homemaker (full-time)	Ⓨ	Ⓕ	Ⓜ
Lawyer or judge	Ⓨ	Ⓕ	Ⓜ
Librarian or archivist	Ⓨ	Ⓕ	Ⓜ
Laborer (unskilled or semi-skilled)	Ⓨ	Ⓕ	Ⓜ
Law enforcement officer	Ⓨ	Ⓕ	Ⓜ
Mathematician, statistician or actuary	Ⓨ	Ⓕ	Ⓜ
Mechanic, machinist or repairman	Ⓨ	Ⓕ	Ⓜ
Military (career)	Ⓨ	Ⓕ	Ⓜ
Nurse	Ⓨ	Ⓕ	Ⓜ
Optometrist	Ⓨ	Ⓕ	Ⓜ
Performing artist, musician or entertainer	Ⓨ	Ⓕ	Ⓜ
Pharmacist or pharmacologist	Ⓨ	Ⓕ	Ⓜ
Physician or surgeon	Ⓨ	Ⓕ	Ⓜ
Plumber	Ⓨ	Ⓕ	Ⓜ
Psychologist (clinician or therapist only)	Ⓨ	Ⓕ	Ⓜ
Scientific researcher	Ⓨ	Ⓕ	Ⓜ
Service worker: private household (maid, cook, etc.)	Ⓨ	Ⓕ	Ⓜ
Service worker: protective (other than law enforcement)	Ⓨ	Ⓕ	Ⓜ
Service worker: other	Ⓨ	Ⓕ	Ⓜ
Skilled tradesman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ

*Not elsewhere classified

Continued in the next column

Social, welfare or recreation worker	Ⓨ	Ⓕ	Ⓜ
Teacher, professor or administrator: college, university	Ⓨ	Ⓕ	Ⓜ
Teacher or administrator: secondary	Ⓨ	Ⓕ	Ⓜ
Teacher or administrator: elementary	Ⓨ	Ⓕ	Ⓜ
Teacher or education specialist: other than above	Ⓨ	Ⓕ	Ⓜ
Technician or technologist (health)	Ⓨ	Ⓕ	Ⓜ
Technician or technologist (other)	Ⓨ	Ⓕ	Ⓜ
Therapist (physical, occupational, speech)	Ⓨ	Ⓕ	Ⓜ
Veterinarian	Ⓨ	Ⓕ	Ⓜ
Writer, journalist, interpreter	Ⓨ	Ⓕ	Ⓜ
Other occupation, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Unemployed		Ⓕ	Ⓜ
Undecided	Ⓨ	Ⓕ	Ⓜ

*Not elsewhere classified

MAKE SURE YOU HAVE ANSWERED ITEM 28

28. Which of the following are important to you in your long-term choice of a career occupation?

(Mark one in each row)

Ⓝ Not Important
Ⓢ Somewhat Important
Ⓥ Very Important

Job openings generally available	Ⓥ	Ⓢ	Ⓝ
Rapid career advancement possible	Ⓥ	Ⓢ	Ⓝ
High anticipated earnings	Ⓥ	Ⓢ	Ⓝ
Well-respected or prestigious occupation	Ⓥ	Ⓢ	Ⓝ
Great deal of independence	Ⓥ	Ⓢ	Ⓝ
Chance for steady progress	Ⓥ	Ⓢ	Ⓝ
Can make an important contribution to society	Ⓥ	Ⓢ	Ⓝ
Can avoid pressure	Ⓥ	Ⓢ	Ⓝ
Can work with ideas	Ⓥ	Ⓢ	Ⓝ
Can be helpful to others	Ⓥ	Ⓢ	Ⓝ
Able to work with people	Ⓥ	Ⓢ	Ⓝ
Intrinsic interest in the field	Ⓥ	Ⓢ	Ⓝ

29. Mark one in each row:

④ Agree Strongly
③ Agree Somewhat
② Disagree Somewhat
① Disagree Strongly

The Federal government is not doing enough to control environmental pollution	①	②	③	④
The Federal government is not doing enough to protect the consumer from faulty goods and services	①	②	③	④
State and Federal governments should provide more money for private colleges and universities	①	②	③	④
The Federal government should help college students with more grants instead of loans	①	②	③	④
There is too much concern in the courts for the rights of criminals	①	②	③	④
People should not obey laws which violate their personal values	①	②	③	④
As long as they work hard, people should be paid equally regardless of ability or quality of work	①	②	③	④
The activities of married women are best confined to the home and family	①	②	③	④
A couple should live together for some time before deciding to get married	①	②	③	④
Parents should be discouraged from having large families	①	②	③	④
If two people really like each other, it's alright for them to have sex even if they've known each other for only a very short time	①	②	③	④
Women should receive the same salary and opportunities for advancement as men in comparable positions	①	②	③	④
Wealthy people should pay a larger share of taxes than they do now	①	②	③	④
Marijuana should be legalized	①	②	③	④
Large political campaign contributions from wealthy individuals should be outlawed	①	②	③	④
Realistically, an individual can do little to bring about changes in our society	①	②	③	④
Compared to most older people in their forties and fifties, young people these days are more idealistic	①	②	③	④
Young people these days understand more about sex than most older people	①	②	③	④
College officials have the right to regulate student behavior off campus	①	②	③	④
Faculty promotions should be based in part on student evaluations	①	②	③	④
College grades should be abolished	①	②	③	④
Colleges would be improved if organized sports were de-emphasized	①	②	③	④
Student publications should be cleared by college officials	①	②	③	④
College officials have the right to ban persons with extreme views from speaking on campus	①	②	③	④
Students from disadvantaged social backgrounds should be given preferential treatment in college admissions	①	②	③	④
Most college officials have been too lax in dealing with student protests on campus	①	②	③	④
Open admissions (admitting anyone who applies) should be adopted by all publicly supported colleges	①	②	③	④
Even if it employs open admissions, a college should use the same performance standards in awarding degrees to all students	①	②	③	④

15. What is your best estimate of your parents' total income last year? Consider annual income from all sources before taxes. (Mark one)

- Less than $3,000 ○
- $3,000–$3,999 ○
- $4,000–$5,999 ○
- $6,000–$7,999 ○
- $8,000–$9,999 ○
- $10,000–$12,499 ○
- $12,500–$14,999 ○
- $15,000–$19,999 ○
- $20,000–$24,999 ○
- $25,000–$29,999 ○
- $30,000–$34,999 ○
- $35,000–$39,999 ○
- $40,000–$49,999 ○
- $50,000 or more ○

16. What is the highest level of formal education obtained by your parents?

(Mark one in each column)	Father	Mother
Grammar school or less	○	○
Some high school	○	○
High school graduate	○	○
Postsecondary school other than college	○	○
Some college	○	○
College degree	○	○
Some graduate school	○	○
Graduate degree	○	○

17. Are you: (Mark all that apply)

- White/Caucasian ○
- Black/Negro/Afro-American ○
- American Indian ○
- Oriental ○
- Mexican-American/Chicano ○
- Puerto Rican-American ○
- Other ○

18. Current religious preference:

(Mark one in each column)	Yours	Father's	Mother's
Baptist	○	○	○
Congregational (U.C.C.)	○	○	○
Eastern Orthodox	○	○	○
Episcopal	○	○	○
Jewish	○	○	○
Latter Day Saints (Mormon)	○	○	○
Lutheran	○	○	○
Methodist	○	○	○
Muslim	○	○	○
Presbyterian	○	○	○
Quaker (Society of Friends)	○	○	○
Roman Catholic	○	○	○
Seventh Day Adventist	○	○	○
Unitarian-Universalist	○	○	○
Other Protestant	○	○	○
Other Religion	○	○	○
None	○	○	○

19. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below?

(Mark one answer for each possible source)	None	$1–$499	$500–$999	$1,000–$1,999	$2,000–$4,000	Over $4,000
Parental, or family aid, or gifts	○	○	○	○	○	○
Grants or Scholarships:						
Basic Educational Opportunity Grant	○	○	○	○	○	○
Supplemental Educational Opportunity Grant	○	○	○	○	○	○
College Work-Study grant	○	○	○	○	○	○
State scholarship or grant	○	○	○	○	○	○
Local or private scholarship or grant	○	○	○	○	○	○
Loans:						
Fed. guaranteed student loan	○	○	○	○	○	○
Nat'l direct student loan	○	○	○	○	○	○
Other loan	○	○	○	○	○	○
Full-time work	○	○	○	○	○	○
Part-time or summer work (other than above)	○	○	○	○	○	○
Savings	○	○	○	○	○	○
Spouse	○	○	○	○	○	○
Your G.I. benefits	○	○	○	○	○	○
Your parent's G.I. benefits	○	○	○	○	○	○
Social secur. dependent's benefits	○	○	○	○	○	○
Other	○	○	○	○	○	○

20. What was your total income last year independent of your parents? Consider annual income from all sources before taxes. (Mark one)

- None ○
- Less than $500 ○
- $500–$999 ○
- $1,000–$1,999 ○
- $2,000–$2,999 ○
- $3,000–$4,999 ○
- $5,000–$9,999 ○
- $10,000 or more ○

21. Are you financially independent of your parents this year? Were you financially independent last year?

(Mark one for each year)	Yes	No
This year	○	○
Last year	○	○

22. Do you have any concern about your ability to finance your college education? (Mark one)

- None (I am confident that I will have sufficient funds) ○
- Some concern (but I will probably have enough funds) ○
- Major concern (not sure I will have enough funds to complete college) ○

23. Which applies to you? (Mark one)

- Presently married ○
- Presently engaged ○
- Have been seeing one person exclusively ○
- Have been seeing several persons, but no one exclusively ○
- Have not been dating in recent months ○

24. Most people identify with (feel they have a great deal in common with) a lot of different groups. But they identify more with some groups than with others. How strongly do you identify with each of the following groups?

(Mark one in each row)	Strongest of all	Strongly	Moderately	Little or not at all
People who live in my community	○	○	○	○
People of my own religion	○	○	○	○
People of my own sex	○	○	○	○
People of my own race or ethnic group	○	○	○	○
People of my own generation	○	○	○	○

25. Rate yourself on each of the following traits as you really think you are when compared with the average student of your own age. We want the most accurate estimate of how you see yourself.

(Mark one for each trait)

Trait	Highest 10 Percent	Above Average	Average	Below Average	Lowest 10 Percent
Academic ability	○	○	○	○	○
Athletic ability	○	○	○	○	○
Artistic ability	○	○	○	○	○
Cheerfulness	○	○	○	○	○
Defensiveness	○	○	○	○	○
Drive to achieve	○	○	○	○	○
Leadership ability	○	○	○	○	○
Mathematical ability	○	○	○	○	○
Mechanical ability	○	○	○	○	○
Originality	○	○	○	○	○
Physical attractiveness	○	○	○	○	○
Political conservatism	○	○	○	○	○
Political liberalism	○	○	○	○	○
Popularity	○	○	○	○	○
Popularity with the opposite sex	○	○	○	○	○
Public speaking ability	○	○	○	○	○
Self-confidence (intellectual)	○	○	○	○	○
Self-confidence (social)	○	○	○	○	○
Sensitivity to criticism	○	○	○	○	○
Stubbornness	○	○	○	○	○
Understanding of others	○	○	○	○	○
Writing ability	○	○	○	○	○

26. How would you characterize your political views? (Mark one)

- Far left ○
- Liberal ○
- Middle-of-the-road ○
- Conservative ○
- Far right ○

30. Below is a list of different undergraduate major fields grouped into general categories. Mark only one circle to indicate your probable field of study.

ARTS AND HUMANITIES
- Art, fine and applied ○
- English (language and literature) ○
- History ○
- Journalism ○
- Language and Literature (except English) ○
- Music ○
- Philosophy ○
- Speech and Drama ○
- Theology or Religion ○
- Other Arts and Humanities ○

BIOLOGICAL SCIENCE
- Biology (general) ○
- Biochemistry or Biophysics ○
- Botany ○
- Marine (Life) Science ○
- Microbiology or Bacteriology ○
- Zoology ○
- Other Biological Science ○

BUSINESS
- Accounting ○
- Business Admin. (general) ○
- Finance ○
- Marketing ○
- Management ○
- Secretarial Studies ○
- Other Business ○

EDUCATION
- Business Education ○
- Elementary Education ○
- Music or Art Education ○
- Physical Education or Recreation ○
- Secondary Education ○
- Special Education ○
- Other Education ○

ENGINEERING
- Aeronautical or Astronautical Eng. ○
- Civil Engineering ○
- Chemical Engineering ○
- Electrical or Electronic Engineering ○
- Industrial Engineering ○
- Mechanical Engineering ○
- Other Engineering ○

PHYSICAL SCIENCE
- Astronomy ○
- Atmospheric Science (incl. Meteorology) ○
- Chemistry ○
- Earth Science ○
- Marine Science (incl. Oceanography) ○
- Mathematics ○
- Physics ○
- Statistics ○
- Other Physical Science ○

PROFESSIONAL
- Architecture or Urban Planning ○
- Home Economics ○
- Health Technology (medical, dental, laboratory) ○
- Library or Archival Science ○
- Nursing ○
- Pharmacy ○
- Therapy (occupational, physical, speech) ○
- Other Professional ○

SOCIAL SCIENCE
- Anthropology ○
- Economics ○
- Geography ○
- Political Science (govt., international relations) ○
- Psychology ○
- Social Work ○
- Sociology ○
- Other Social Science ○

TECHNICAL
- Building Trades ○
- Data Processing or Computer Programming ○
- Drafting or Design ○
- Electronics ○
- Mechanics ○
- Other Technical ○

OTHER FIELDS
- Agriculture ○
- Communications (radio, T.V., etc.) ○
- Computer Science ○
- Forestry ○
- Law Enforcement ○
- Military Science ○
- Other Field ○
- Undecided ○

31. Indicate the importance to you personally of each of the following:

(Mark one for each item)

Ⓝ Not Important
Ⓢ Somewhat Important
Ⓥ Very Important
Ⓔ Essential

Becoming accomplished in one of the performing arts (acting, dancing, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an authority in my field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Obtaining recognition from my colleagues for contributions to my special field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing the political structure	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing social values	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Raising a family	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having administrative responsibility for the work of others	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being very well off financially	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Helping others who are in difficulty	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Making a theoretical contribution to science	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Writing original works (poems, novels, short stories, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Creating artistic work (painting, sculpture, decorating, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being successful in a business of my own	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming involved in programs to clean up the environment	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Developing a meaningful philosophy of life	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Participating in a community action program	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Keeping up to date with political affairs	Ⓔ	Ⓥ	Ⓢ	Ⓝ

32. What is your best guess as to the chances that you will:

(Mark one for each item)

Ⓝ No Chance
Ⓛ Very Little Chance
Ⓢ Some Chance
Ⓥ Very Good Chance

Change major field?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Change career choice?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Fail one or more courses?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Graduate with honors?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be elected to a student office?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Join a social fraternity, sorority, or club?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Live in a coeducational dorm?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Live in a commune while in college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be elected to an academic honor society?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Make at least a "B" average?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Need extra time to complete your degree requirements?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Have to work at an outside job during college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Seek vocational counseling?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Seek individual counseling on personal problems?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Enroll in honors courses?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get a bachelor's degree (B.A., B.S., etc.)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Drop out of this college temporarily (exclude transferring)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Drop out permanently (exclude transferring)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Transfer to another college before graduating?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Enter active duty in the armed services before completing college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be satisfied with your college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be more successful after graduation than most students attending this college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Find a job after graduation in the field for which you were trained?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get married while in college? (skip if married)	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get married within a year after college? (skip if married)	Ⓥ	Ⓢ	Ⓛ	Ⓝ

33. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
34. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
35. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
36. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
37. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

DIRECTIONS.
The remaining circles are provided for items specifically designed by your college, rather than by the Higher Education Laboratory. If your college has chosen to use the circles, observe carefully the supplemental directions given you.

38. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
39. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
40. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
41. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
42. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

THANK YOU!

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